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August 1, 2022
VIA EMAIL (Maggie.mccann@camdencounty.com) ONLY

Ms. Maggie McCann Johns, Director of Camden County Parks
CAMDEN COUNTY DEPARTMENT OF PARKS
1301 Park Boulevard
Cherry Hill, New Jersey 08002-3752

Re: Cap-In-Place Assessment - Summary Report
Robert B. Johnson Park Improvement Project
723 Carl Miller Boulevard
Block 520, Lot 26; Block 522, Lot 9 (partial); Block 523, Lot 13
Camden City, Camden County, New Jersey
FPA No. 17087.006

Dear Ms. McCann Johns:

INTRODUCTION

French and Parrello Associates (FPA) has completed a Cap-in-Place Assessment of the on-site soil in regard to the proposed improvement project at the Robert B. Johnson Park, located at 723 Carl Miller Boulevard, City of Camden, New Jersey (referred to as the Site or Subject Property). The purpose of the Cap-in-Place Assessment was to evaluate the top one-foot of existing Site soils throughout the Subject Property to determine if the soil meets the most stringent New Jersey Department of Environmental Protection (NJDEP) Soil Remediation Standards and therefore can be utilized as an engineering control for the underlying contaminated historic fill material for portions of the Park that have no planned improvements.

BACKGROUND

FPA previously completed a Preliminary Assessment on behalf of the Camden County Department of Parks (CCDP) that identified a total of four (4) areas of concern (AOCs) warranting further evaluation as part of the Site Investigation. The AOCs warranting further evaluation include AOC-1: Historic Fill Material, AOC-2: Historic Dumping, AOC-3: Former Junk Yard, and AOC-4: Potential for Residential Heating Oil Underground Storage Tanks (USTs). The Site Investigation included a combination of historic research, a geophysical survey, subsurface investigation, and analytical testing of soil samples. At the completion of the Site Investigation, FPA had determined that further evaluation of AOC-2, AOC-3, and AOC-4 was not warranted. However, analytical results of the soil samples collected to investigate AOC-1: Historic Fill

Material reported Polycyclic Aromatic Hydrocarbons (PAHs), various metals and total Polychlorinated Biphenyls (PCBs) above the applicable NJDEP Residential and/or Nonresidential Soil Remediation Standards. Additionally, visual indicators of historic fill material including brick fragments, glass, coal, and wood fragments were observed in the subsurface soils on-site. Based on these findings, historic fill material is present as a Site-wide condition and contains contaminants above the applicable remediation standards.

Based on recent discussions, establishing engineering controls (cap) and implementing institutional controls (deed notice) appears to be the most cost efficient and feasible remedial action for the Site-wide historic fill material. The proposed improvements (turf football field, new baseball field) and existing hard scape features (asphalt paved parking lot, concrete walkways, and concessions area) will function as engineering controls. The remaining grass areas within the Park, must also function as an engineering control to restrict access to the contaminated soils. FPA has proposed completing a cap-in-place assessment of these grass areas to determine if the on-site soils meet NJDEP requirements and therefore can be utilized as a soil cap. The sampling completed as part of this supplemental classification event was performed in accordance with the NJDEP Field Sampling Procedures Manual, the NJDEP Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the applicable NJDEP Technical Guidance Documents. The Site location and layout is presented as Drawing No. 1.

SAMPLING METHODOLOGY

Prior to the completion of the soil borings, FPA utilized the proposed Park improvement concept plans to identify major improvement features (i.e., new athletic fields and associated features) and existing Site features (i.e., asphalt and concrete surfaces) that could function as engineering controls to restrict contact with the underlying historic fill material. The approximate volume of the "transition areas" where no new improvements are proposed were calculated utilizing a depth of one foot to determine if the existing Site soils could function as a one foot "clean" soil cap. Based on the calculations performed, the "transition areas" accounted for an approximate area of 347,000 ft^2 which represents a volume of 12,850 cubic yards of soil requiring analytical testing. The major improvements features and existing Site features that can function as engineering controls are presented on Drawing No. 1.

According to the NJDEP Fill Material Guidance for SRP Sites (Version 4.0, October 2021), twenty-six (26) soil samples collected from discreet depth locations are required to classify a volume of soil measuring 12,000 – 13,000 cubic yards. The intent of the samples is to properly classify the top one foot of existing Site soils; therefore, 13 discrete samples were collected from the 0.0 – 0.5 foot interval and the remaining 13 soil samples were collected from the 0.5 – 1.0 foot interval.

SOIL SAMPLE COLLECTION AND ANALYSIS

On July 12, 2022, FPA mobilized to the Site to collect the Cap-in-Place (CIP) soil samples from the targeted depth interval of the "transition areas" as detailed above. FPA field personnel utilized a properly decontaminated stainless steel hand auger to advance each boring in the pre-

determined locations. Each soil boring was advanced to a maximum depth of 2.0 feet below ground surface and the lithology of each boring column was recorded to determine the presence/absence of historic fill in the top 1.0 foot of soils. According to the soil boring logs, indicators of historic fill (brick, coal, glass, wood pieces ect.) were observed in 22 of the 26 soil borings at or near ground surface. Historic fill indicators were not observed in borings CIP-11, CIP-14, CIP-19, and CIP-26; however, these locations correspond to Site Investigation borings HF-14 and HF-19 where historic fill was observed at deeper depths.

Upon extraction from the subsurface, the soil from each boring was visually and olfactory inspected for evidence of environmental impact as well as screened for volatile organic vapors utilizing a photo ionization detector (PID). No elevated PID readings above background were recorded in any soil borings. One soil sample was collected from each boring at the 0.0 – 0.5 foot interval or the 0.5 – 1.0 foot interval utilizing disposable Teflon™ scoops. The soil samples were then transferred directly into laboratory supplied glassware and preserved in a temperature-controlled environment (4°C) until they were transferred to a NJDEP-certified laboratory, within 48-hours. The CIP sample locations are provided on Drawing No. 2 and the soil boring logs are provided as Appendix A.

Soil samples CIP-1 through CIP-26 were submitted to Alpha Analytical (Alpha) an NJDEP-certified laboratory (MA935) for Target Analyte List/Target Compounds List (TAL/TCL) +30 and Extractable Petroleum Hydrocarbons (EPH) analysis per the NJDEP Fill Material Guidance Document.

SUMMARY OF ANALYTICAL RESULTS

According to the analytical results, PAHs and select metals were detected above the NJDEP Residential Ingestion/Dermal Soil Remediation Standards (RIDSRS) and/or the NJDEP Migration to Groundwater Soil Remediation Standards (MGWSRS) within all 26 soil samples collected. Soil samples CIP-1 and CIP-2 contained fractionated EPH results that exceeded their respective sample-specific ingestion/dermal criteria. Further, select pesticides (Heptachlor and Chlordane) were detected above the NJDEP RIDSRS and/or MGWSRS within sample CIP-1. Lastly, PCBs were detected above the NJDEP RIDSRS within samples CIP-21 and CIP-26. The analytical results for the CIP samples are presented in Table No. 1 and the laboratory data package is provided as Appendix B.

FINDINGS & CONCLUSION

FPA has completed the Cap-in-Place Assessment of the top one foot of existing Site soils within the “transition areas” at the Robert B. Johson Park. A total of 26 soil samples have been collected from the 0.0 – 0.5 foot and the 0.5 – 1.0 foot intervals to classify the soil. According to analytical results, PAHs and metals are prevalent in the surficial soils at concentrations exceeding the RIDRSR and/or MGWSRS. Additionally, EPH, PCBs and select pesticides were also detected above the RIDSRS and/or MGWSRS within certain samples.

Based on these results, the Cap-In-Place Assessment and previously completed Site Investigation have confirmed the historic fill material is a Site-wide condition and contamination is present from surface grade to a depth of 20 feet below surface grade. The proposed new Site features and existing impervious cover can be utilized as engineering controls (cap); however, the "transition areas" where no improvements are proposed would be required to be excavated, loaded into tri-axel dump trucks, and disposed off-site at an approved disposal facility. A new soil cap would be constructed consisting of orange snow fence demarcation barrier and one foot of certified clean soil. FPA has provided the following rough cost estimate dispose of one foot of existing Site soils within the "transition areas" and then replace with a new soil cap:

1. Excavate, Load, Transport and Dispose of approximately 13,000 yards (20,000 tons) of contaminated soil (assumes non-hazardous). $150.00 per ton =$3,000,000.00
2. Orange snow fence demarcation barrier cost to purchase and installation for 347,000 ft^2. $0.50 per square foot = $173,500.00
3. Purchase, transport, install one-foot thick of certified clean soil cap of approximately 13,000 yards (20,000 tons). $75.00 per ton = $1,500,000.00
4. Environmental Oversight, NJDEP Reporting and LSRP Services = $200,000.00

Total estimate to construct a new engineering control consisting of one-foot certified clean soil for transition areas = $4,873,500.00. Note, this cost does not include the cost to construct the new features (athletic fields and impervious cover) that will also function as engineering controls.

FPA would like to make the Camden County Department of Parks aware that fundings is available through the Hazardous Discharge Site Remediation Fund (HDSRF) for public entities performing remediation. If applied for and approved, the HDSRF funding could be utilized to mitigate the costs associated with constructing the Site-wide engineering controls.

We thank you for the opportunity to provide service to you on this important project. If you have any questions, please do not hesitate to contact the undersigned at 732-312-9845 or Tyler.Martz@FPAengineers.com.

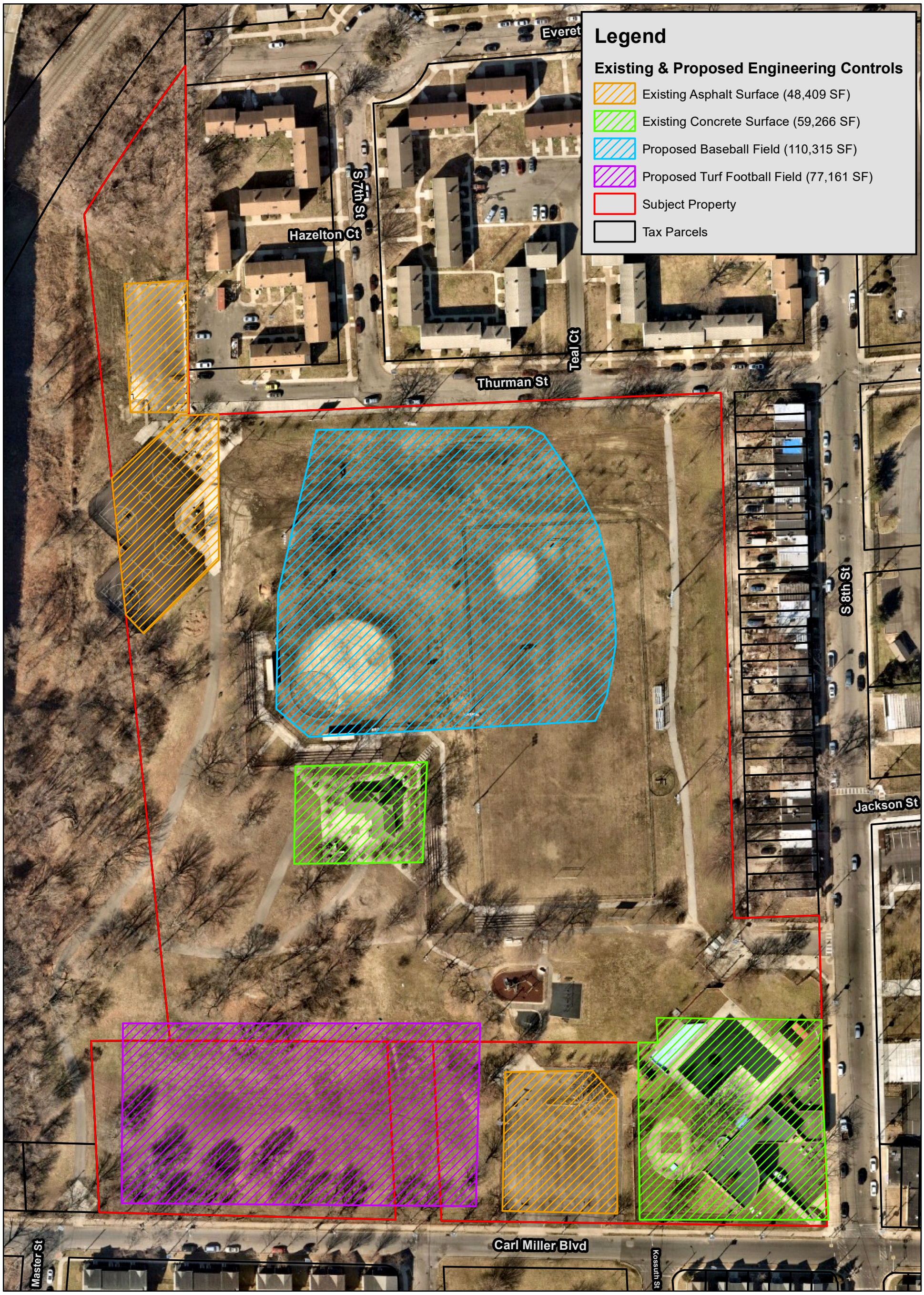
Respectfully submitted,
FRENCH & PARRELLO ASSOCIATES

Tyler Martz, LSRP
Project Manager
Environmental Services

Matthew Kearny, PE
Vice President
Regional Manager

Attachments:
Drawing No. 1 & 2
Table No. 1
Appendix A & B

Drawings



NOTE:
THE AERIAL SHOWN WAS PPROVIDED BY NEARMAP US, INC. AND TAKEN MARCH 2021.

N

0 100
Feet

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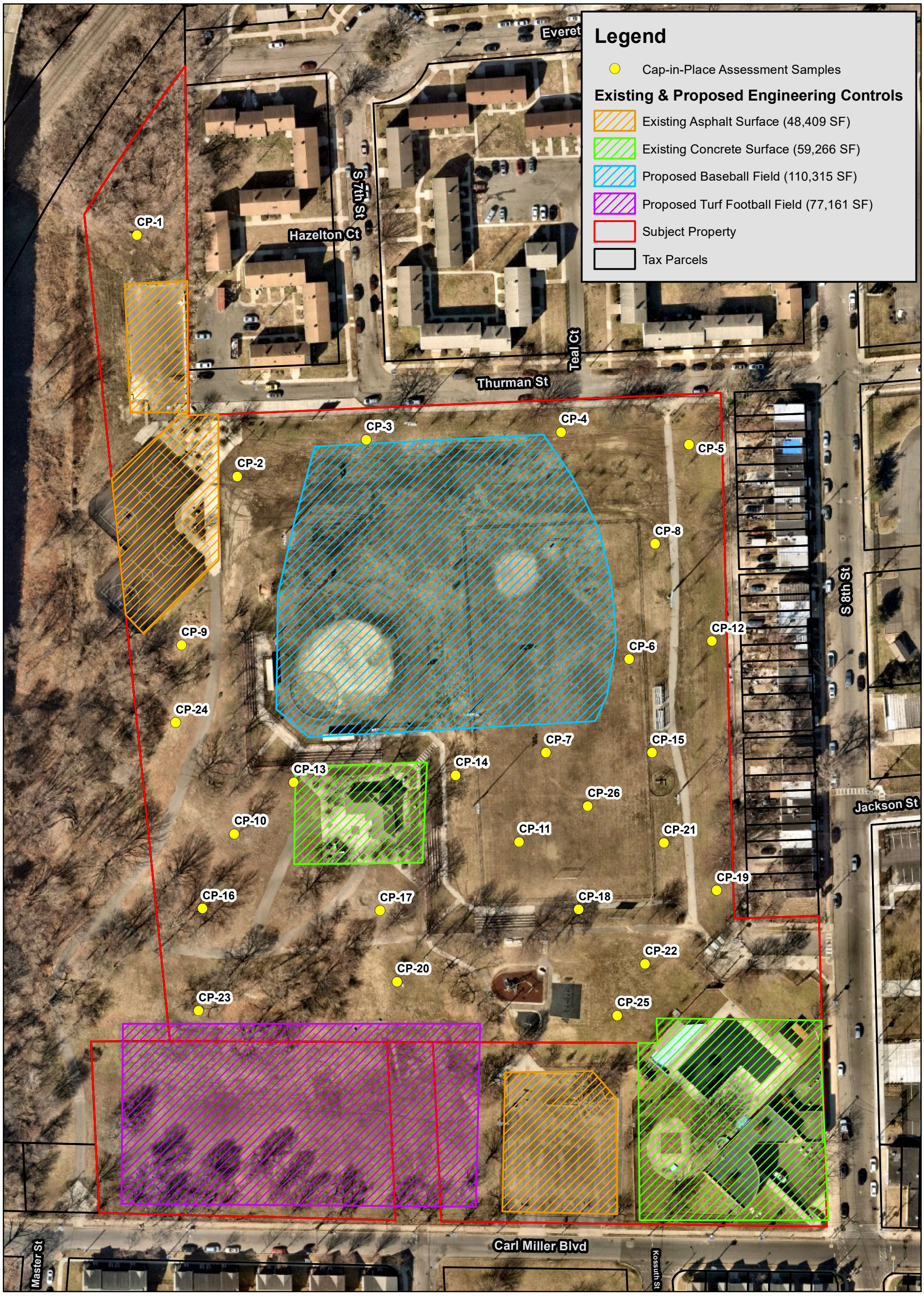
ROBERT B. JOHNSON
PARK IMPROVEMENT PROJECT
723 CARL MILLER BLVD., CITY OF CAMDEN
CAMDEN COUNTY, NEW JERSEY

SITE LAYOUT MAP WITH
EXISTING & PROPOSED ENGINEERING CONTROLS

SCALE:	BLOCK:	LOT:	DRAWING:
1 " = 100 '	520; 522; 523	26; 9; Portion of 13	1
DATE:	DRAWN BY:	PROJECT NUMBER:	
07/29/2022	T.M.	17087.006	



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0 100
Feet

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ROBERT B. JOHNSON
PARK IMPROVEMENT PROJECT
723 CARL MILLER BLVD., CITY OF CAMDEN
CAMDEN COUNTY, NEW JERSEY

CAP IN PLACE ASSESSMENT SOIL SAMPLE LOCATIONS

SCALE:	BLOCK:	LOT:	DRAWING:
1 " = 100 '	520; 522; 523	26; 9; Portion of 13	2
DATE:	DRAWN BY:	PROJECT NUMBER:	
07/29/2022	T.M.	17087.006	

Tables

TABLE NO. 1
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY
17087.006 ROBERT B. JOHNSON PARK - CAP-IN-PLACE ASSESSMENT

SAMPLE ID:				CP-1				CP-2				CP-3				CP-4				CP-5			
LAB ID:				L2237235-01				L2237235-02				L2237235-03				L2237235-04				L2237235-05			
COLLECTION DATE:				7/12/2022				7/12/2022				7/12/2022				7/12/2022				7/12/2022			
SAMPLE DEPTH:				0-0.5'				0.5-1.0'				0-0.5'				0.5-1.0'				0-0.5'			
SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL				SOIL			
ANALYTE	**MGWSRS**	**RISRS**	**RIDSRS**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
Extractable Petroleum Hydrocarbons (EPH) Cat II																							
Total EPH	NA	NA	5300	-		-	-	-		-	-	179		24.3	24.3	83		27.5	27.5	141		24.4	24.4
EPH Category II - Fractionated																							
C10-C12 Aromatics	NA	NA	NA	190		86.5	86.5	ND		88.1	88.1	-	-	-	-	-	-	-	-	-	-	-	-
C12-C16 Aromatics	NA	NA	NA	336		130	130	137		132	132	-	-	-	-	-	-	-	-	-	-	-	-
C16-C21 Aromatics	NA	NA	NA	3260		216	216	705		220	220	-	-	-	-	-	-	-	-	-	-	-	-
C21-C36 Aromatics	NA	NA	NA	4080		346	346	1690		352	352	-	-	-	-	-	-	-	-	-	-	-	-
Total EPH	NA	NA	*SS	**7870**		86.5	86.5	**2530**		88.1	88.1	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																							
Benzene	0.0094	2.2	3	**0.0093**		0.00064	0.00021	0.00028	J	0.00064	0.00021	ND		0.00053	0.00018	ND		0.00071	0.00024	ND		0.00056	0.00018
Toluene	7.8	NA	6300	0.01		0.0013	0.00069	ND		0.0013	0.00069	ND		0.0011	0.00058	ND		0.0014	0.00078	ND		0.0011	0.00061
Ethylbenzene	15	10	7800	0.0021		0.0013	0.00018	ND		0.0013	0.00018	ND		0.0011	0.00015	ND		0.0014	0.0002	ND		0.0011	0.00016
Xylenes, Total	19	NA	12000	0.048		0.0013	0.00037	ND		0.0013	0.00037	ND		0.0011	0.00031	ND		0.0014	0.00042	ND		0.0011	0.00032
Styrene	2.1	NA	16000	0.0051		0.0013	0.00025	ND		0.0013	0.00025	ND		0.0011	0.00021	ND		0.0014	0.00028	ND		0.0011	0.00022
Isopropylbenzene	22	NA	7800	0.00057	J	0.0013	0.00014	ND		0.0013	0.00014	ND		0.0011	0.00012	ND		0.0014	0.00016	ND		0.0011	0.00012
Methyl Acetate	22	NA	78000	0.015		0.0051	0.0012	ND		0.0051	0.0012	0.0062		0.0043	0.001	0.0021	J	0.0057	0.0014	ND		0.0045	0.0011
Total VOCs	NA	NA	NA	0.09007	-	-	-	0.00028	-	-	-	0.0062	-	-	-	0.0021	-	-	-	-	-	-	-
VOC TICs																							
Total TIC Compounds	NA	NA	NA	0.868	J	0	0	0.009	J	0	0	0.007	J	0	0	0.003	J	0	0	-		-	-
VOCs High (5035)																							
1,2,4-Trichlorobenzene	0.52	94	780	**1.4**		0.12	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Semivolatile Organic Compounds (SVOCs)																							
Acenaphthene		NA	3600	12		2.9	0.3	2.5		1.5	0.16	0.29	J	0.69	0.072	0.15		0.15	0.016	0.14		0.14	0.015
Hexachlorobenzene	0.17	NA	0.43	**ND**		**1**	**0.35**	**ND**		**0.54**	**0.18**	**ND**		**0.25**	**0.083**	ND		0.055	0.018	ND		0.051	0.017
Bis(2-chloroethyl)ether	0.33	NA	0.63	**ND**		**1.3**	**0.44**	**ND**		**0.67**	**0.22**	**ND**		**0.31**	**0.1**	ND		0.069	0.023	ND		0.064	0.021
2,4-Dinitrotoluene	0.27	NA	0.8	**ND**		**1.8**	**0.61**	**ND**		**0.93**	**0.31**	**ND**		**0.43**	**0.14**	ND		0.096	0.032	ND		0.088	0.029
2,6-Dinitrotoluene	0.27	NA	0.8	**ND**		**1.4**	**0.48**	**ND**		**0.74**	**0.25**	**ND**		**0.34**	**0.11**	ND		0.076	0.025	ND		0.07	0.023
Fluoranthene	NA	NA	2400	410		11	2.1	19		1.1	0.21	7.6		0.52	0.099	2.8		0.12	0.022	3.1		0.11	0.02
Hexachlorobutadiene	0.17	NA	8.9	**ND**		**1.4**	**0.45**	**ND**		**0.69**	**0.23**	**ND**		**0.32**	**0.11**	ND		0.071	0.024	ND		0.066	0.022
Hexachloroethane	0.17	NA	17	**ND**		**1.8**	**0.59**	**ND**		**0.91**	**0.3**	**ND**		**0.42**	**0.14**	ND		0.093	0.031	ND		0.086	0.029
Isophorone	0.23	NA	570	**ND**		**1.2**	**0.41**	**ND**		**0.63**	**0.21**	**ND**		**0.29**	**0.097**	ND		0.064	0.021	ND		0.06	0.02
Naphthalene	19	5.7	2500	**87**		3.6	0.44	**18**		1.9	0.23	0.62	J	0.87	0.1	0.16	J	0.19	0.023	0.12	J	0.18	0.022
Nitrobenzene	0.17	7.5	160	**ND**		**1.6**	**0.54**	**ND**		**0.83**	**0.28**	**ND**		**0.38**	**0.13**	ND		0.085	0.028	ND		0.079	0.026
n-Nitrosodi-n-propylamine	0.17	NA	0.17	**ND**		**0.92**	**0.3**	**ND**		**0.47**	**0.16**	**ND**		**0.22**	**0.072**	ND		0.048	0.016	ND		0.045	0.015
Bis(2-ethylhexyl)phthalate	14	NA	39	ND		3.6	0.38	ND		1.9	0.19	0.4	J	0.87	0.09	0.055	J	0.19	0.02	2		0.18	0.018
Butyl benzyl phthalate	29	NA	290	ND		3.6	0.49	ND		1.9	0.25	ND		0.87	0.12	ND		0.19	0.026	0.059	J	0.18	0.024
Benzo(a)anthracene	0.71	78000	5.1	**200**		6.1	2	**18**		0.63	0.21	**4.1**		0.29	0.098	**1.3**		0.064	0.022	**1.6**		0.06	0.02
Benzo(a)pyrene	NA	3500	0.51	**210**		13	4.4	**19**		1.4	0.46	**4.8**		0.63	0.21	**1.2**		0.14	0.047	**1.5**		0.13	0.043
Benzo(b)fluoranthene	NA	78000	5.1	**220**		4.6	1.5	**16**		0.47	0.16	**5.9**		0.22	0.072	1.7		0.048	0.016	1.9		0.045	0.015
Benzo(k)fluoranthene	NA	780000	51	**61**		0.77	0.26	4.6		0.39	0.13	1.6		0.18	0.061	0.48		0.04	0.013	0.7		0.037	0.012
Chrysene	NA	NA	510	**170**		11	1.9	20		1.1	0.19	3.8		0.52	0.089	1.5		0.12	0.02	1.6		0.11	0.018
Acenaphthylene	NA	NA	NA	96		2.9	0.41	22		1.5	0.21	0.91		0.69	0.097	0.23		0.15	0.021	0.41		0.14	0.02
Anthracene	NA	NA	18000	82		2.2	0.32	12		1.1	0.17	1.2		0.52	0.077	0.41		0.12	0.017	0.58		0.11	0.016
Benzo(ghi)perylene	NA	NA	NA	100		2.9	0.43	9.5		1.5	0.22	2.3		0.69	0.1	0.74		0.15	0.022	0.89		0.14	0.021
Fluorene	NA	NA	2400	69		3.6	0.35	8.7		1.9	0.18	0.42	J	0.87	0.083	0.13	J	0.19	0.018	0.2		0.18	0.017
Phenanthrene	NA	NA	NA	320		11	1.3	25		1.1	0.13	4.5		0.52	0.062	1.9		0.12	0.014	2.2		0.11	0.013
Dibenzo(a,h)anthracene	NA	7800	0.51	**23**		1.3	0.42	**2.8**		0.65	0.22	**0.57**		0.3	0.1	0.2		0.067	0.022	0.24		0.062	0.02
Indeno(1,2,3-cd)pyrene	NA	78000	5.1	**130**		1.5	0.51	**9.2**		0.78	0.26	2.6		0.36	0.12	0.84		0.08	0.027	1		0.074	0.025
Pyrene	NA	NA	1800	320		11	1.6	30		1.1	0.16	6.5		0.52	0.075	2.5		0.12	0.017	2.7		0.11	0.015
4-Chloroaniline	0.23	NA	2.7	**ND**		**3.6**	**0.42**	**ND**		**1.9**	**0.21**	**ND**		**0.87**	**0.1**	ND		0.19	0.022	ND		0.18	0.02
Dibenzofuran	NA	NA	NA	46		3.6	0.32	ND		1.9	0.16	0.28	J	0.87	0.076	0.1	J	0.19	0.017	0.13	J	0.18	0.016
2-Methylnaphthalene	3.1	NA	240	**38**		4.4	0.39	**17**		2.2	0.2	0.25	J	1	0.092	0.15	J	0.23	0.02	0.088	J	0.21	0.019
2,4-Dichlorophenol	0.19	NA	190	**ND**		**1.8**	**0.59**	**ND**		**0.9**	**0.3**	**ND**		**0.42**	**0.14**	ND		0.092	0.031	ND		0.085	0.028
2,4-Dinitrophenol	0.33	NA	130	**ND**		**5.2**	**1.7**	**ND**		**2.7**	**0.87**	**ND**		**1.2**	**0.4**	ND		0.28	0.089	ND		0.26	0.083
Phenol	21	39000	19000	3.8		3.6	0.43	ND		1.9	0.22	ND		0.87	0.1	0.034	J	0.19	0.023	ND		0.18	0.021
2-Methylphenol	0.77	NA	320	**0.92**	J	3.6	0.57	**ND**		**1.9**	**0.29**	**ND**		**0.87**	**0.13**	ND		0.19	0.03	ND		0.18	0.027
3-Methylphenol/4-Methylphenol	0.75	NA	630	**3.1**	J	5.2	0.53	**ND**		**2.7**	**0.27**	**ND**		**1.2**	**0.12**	0.045	J	0.28	0.028	ND		0.26	0.026
Carbazole	NA	NA	NA	15		3.6	0.23	0.75	J	1.9	0.12	0.46	J	0.87	0.055	0.12	J	0.19	0.012	0.23		0.18	0.011
Benzaldehyde	NA	NA	170	ND		4.8	0.57	ND		2.5	0.29	ND		1.1	0.13	ND		0.25	0.03	0.11	J	0.23	0.028
Biphenyl	NA	NA	87	7.8	J	8.3	0.47	1.9	J	4.2	0.24	ND		2	0.11	0.029	J	0.44	0.025	ND		0.4	0.023
Atrazine	0.33	NA	220	**ND**		**2.9**	**1.3**	**ND**		**1.5**	**0.65**	**ND**		**0.69**	**0.3**	ND		0.15	0.067	ND		0.14	0.062
2,3,4,6-Tetrachlorophenol	26	NA	1900	ND		3.6	0.74	ND		1.9	0.38	ND		0.87	0.18	ND		0.19	0.039	ND		0.18	0.036
1,4-Dioxane	0.067	45	7	**ND**		**0.55**	**0.17**	**ND**		**0.28**	**0.085**	**ND**		**0.13**	**0.04**	ND		0.029	0.0087	ND		0.027	0.0081
Total SVOCs	NA	NA	NA	2144.62	-	-	-	255.95	-	-	-	49.1	-	-	-	16.773	-	-	-	21.497	-	-	-
SVOC TICs																							
Total TIC Compounds	NA	NA	NA	467	J	0	0	143	J	0	0	9.87	J	0	0	6.76	J	0	0	7.6	J	0	0
Pesticides																							
Beta-BHC	0.0046	NA	0.3	**ND**		**0.017**	**0.00645**	ND		0.00175	0.00066	ND		0.00164	0.00062	ND		0.00184	0.00069	ND		0.00166	0.00063
Heptachlor	0.083	NA	0.15	**0.689**		0.0085	0.00381	ND		0.00087	0.00039	ND		0.00082	0.00036	ND		0.00091	0.00041	ND		0.00083	0.00037
Heptachlor epoxide	0.081	NA	0.076	**0.141**	IP	0.0319	0.00956	ND		0.00329	0.00098	ND		0.00308	0.00092	ND		0.00344	0.00103	ND		0.00312	0.00093
4,4'-DDE	0.47	NA	2	ND		0.017	0.00393	0.0877	P	0.00175	0.0004	0.0317	P	0.00164	0.00038	0.00727		0.00184	0.00042	0.00937		0.00166	0.00038
4,4'-DDD	0.47	NA	2.3	ND		0.017	0.00606	ND		0.00175	0.00062	0.00592	IP	0.00164	0.00058	ND		0.00184	0.00065	0.00124	JIP	0.00166	0.00059
4,4'-DDT	0.67	NA	1.9	ND		0.0319	0.0137	0.192	P	0.00658	0.00282	0.0252		0.00308	0.00132	ND		0.00344	0.00148	0.00984		0.00312	0.00134
Chlordane	1.4	NA	0.27	**98.2**		2.83	1.13	ND		0.0146	0.00581	ND		0.0137	0.00544	ND		0.0153	0.00608	ND		0.0139	0.00552
cis-Chlordane	1.4	NA	0.27	**14.7**	P	0.425	0.118	ND		0.00219	0.00061	ND		0.00205	0.00057	ND		0.00229	0.00063	0.00358	IP	0.00208	0.00058
trans-Chlordane	1.4	NA	0.27	**11.6**		0.425	0.112	ND		0.00219	0.00057	ND		0.00205	0.00054	ND		0.00229	0.0006	0.00194	JIP	0.00208	0.00055
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1260	1.6	NA	0.25	ND		0.183	0.0339	0.0887	J	0.183	0.0338	0.0621		0.0332	0.00613	ND		0.0383	0.00708	0.0364		0.0344	0.00636
Aroclor 1268	1.6	NA	0.25	ND		0.183	0.019	0.0298	J	0.183	0.0189	0.0326	J	0.0332	0.00344	ND		0.0383	0.00397	0.0134	J	0.0344	0.00356
PCBs, Total	1.6	NA	0.25	ND		0.183	0.0163	0.118	J	0.183	0.0162	0.0947	J	0.0332	0.00294	ND		0.0383	0.0034	0.0498	J	0.0344	0.00306
Total Metals																							
Aluminum, Total	NA	NA	78000	2260		8.77	2.37	3130		8.52	2.3	2970		8.31	2.24	14800		9.27	2.5	3530		8.54	2.3
Antimony, Total	5.4	NA	31	3.82	J	4.38	0.333	3.85	J	4.26	0.324	5.19		4.15	0.316	1.84	J	4.64	0.352	1.09	J	4.27	0.324
Arsenic, Total	19	1100	19	7.35		0.877	0.182	11.1		0.852	0.177	8.73		0.831	0.173	7.84		0.927	0.193	5.42		0.854	0.178
Barium, Total	2100	870000	16000	1080		0.877	0.152	236		0.852	0.148	254		0.831	0.144	362		0.927	0.161	86.2		0.854	0.148
Beryllium, Total	0.7	2000	160	0.21	J	0.438	0.029	0.392	J	0.426	0.028	0.216	J	0.415	0.027	**0.881**		0.464	0.031	0.239	J	0.427	0.028
Cadmium, Total	1.9	2600	71	1.24		0.877	0.086	1.5		0.852	0.083	**2.23**		0.831	0.081	0.779	J	0.927	0.091	0.709	J	0.854	0.084
Calcium, Total	NA	NA	NA	8390		8.77	3.07	2640		8.52	2.98	5030		8.31	2.91	39000		9.27	3.24	2540		8.54	2.99
Chromium, Total	NA	NA	NA	43.3		0.877	0.084	24.9		0.852	0.082	14.4		0.831	0.08	28.8		0.927	0.089	10.6		0.854	0.082
Cobalt, Total	90	520	23	17.1		1.75	0.146	4.07		1.7	0.141	3.47		1.66	0.138	9.07		1.85	0.154	2.08		1.71	0.142
Copper, Total	910	NA	3100	117		0.877	0.226	123		0.852	0.22	116		0.831	0.214	150		0.927	0.239	29.9		0.854	0.22
Iron, Total	NA	NA	NA	9130		4.38	0.792	17500		4.26	0.769	15300		4.15	0.75	10700		4.64	0.837	10100		4.27	0.771
Lead, Total	90	NA	400	**404**		4.38	0.235	**407**		4.26	0.228	**328**		4.15	0.223	**95.1**		4.64	0.248	**108**		4.27	0.229
Magnesium, Total	NA	NA	NA	811		8.77	1.35	548		8.52	1.31	1370		8.31	1.28	5510		9.27	1.43	1340		8.54	1.31
Manganese, Total	NA	87000	1900	93.9		0.877	0.139	139		0.852	0.135	580		0.831	0.132	346		0.927	0.147	81.5		0.854	0.136
Mercury, Total	0.1	520000	23	**0.454**		0.075	0.049	**1.26**		0.073	0.047	**0.576**		0.075	0.049	**0.154**		0.086	0.056	**0.158**		0.076	0.049
Nickel, Total	48	20000	1600	26.8		2.19	0.212	10.1		2.13	0.206	9.5		2.08	0.201	36.9		2.32	0.224	4.8		2.13	0.207
Potassium, Total	NA	NA	NA	214	J	219	12.6	706		213	12.3	393		208	12	2070		232	13.4	607		213	12.3
Selenium, Total	11	NA	390	0.973	J	1.75	0.226	0.23	J	1.7	0.22	ND		1.66	0.214	0.371	J	1.85	0.239	ND		1.71	0.22
Silver, Total	0.5	NA	390	**0.789**	J	0.877	0.248	**ND**		**0.852**	**0.241**	0.357	J	0.831	0.235	**ND**		**0.927**	**0.262**	**ND**		**0.854**	**0.242**
Sodium, Total		NA	NA	102	J	175	2.76	118	J	170	2.68	46.9	J	166	2.62	1130		185	2.92	265		171	2.69
Vanadium, Total	NA	170000	390	64.7		0.877	0.178	28		0.852	0.173	16.9		0.831	0.169	31.2		0.927	0.188	17.1		0.854	0.173
Zinc, Total	930	NA	23000	**1120**		4.38	0.257	268		4.26	0.249	593		4.15	0.243	308		4.64	0.272	104		4.27	0.25
General Chemistry																							
Solids, Total	NA	NA	NA	89.4		0.1	NA	88.3		0.1	NA	94.7		0.1	NA	86.2		0.1	NA	92.8		0.1	NA
Cyanide, Total	20	NA	47	1	J	1.1	0.23	1.6		1.1	0.24	ND		0.98	0.21	0.32	J	1.1	0.24	ND		1	0.22

All units are presented in milligrams per kilogram (mg/kg) unless stated otherwise
SS - Sample Specific Standard generated utilizing the 2021 NJDEP EPH Category II, Ingestion/Dermal Calculator
-- - Sample not analyzed for this parameter
J - Designates the concentration is below the Quantitation Limit (RL) but above the Method Detection Limit (MDL); therefore, the concentration is considered estimated.
P - Designates the relative percent difference (RPD) between the two gas chromatography results exceeds the method-specified criteria for this analyte.
NA - Standard not applicable because appropriate toxicological information does not exist, the groundwater remediation standard is a secondary standard, or the calculated health based criterion exceeds one million mg/kg or the soil saturation limit.
ND - Not Detected at the method detection limit (MDL).
RISRS - Residential Inhalation Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
RIDSRS - Residential Ingestion/Dermal Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
MGWSRS - Migration to Groundwater Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
Bold values and highlighted cells indicate the concentration exceeds the more stringent of the RISRS or RIDSRS
Bold and blue colored values indicate the concentration exceeds the MGWSRS
Red Bold values indicate the Method Detection Limit (MDL) is elevated and may exceed the applicable standards.

TABLE NO. 1
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY
17087.006 ROBERT B. JOHNSON PARK - CAP-IN-PLACE ASSESSMENT

SAMPLE ID:				CP-6				CP-7				CP-8				CP-9				CP-10			
LAB ID:				L2237235-06				L2237235-07				L2237235-08				L2237235-09				L2237235-10			
COLLECTION DATE:				7/12/2022				7/12/2022				7/12/2022				7/12/2022				7/12/2022			
SAMPLE DEPTH:				0.5-1.0'				0-0.5'				0.5-1.0'				0.5-1.0'				0-0.5'			
SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL				SOIL			
ANALYTE	**MGWSRS**	**RISRS**	**RIDSRS**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
Extractable Petroleum Hydrocarbons (EPH) Cat II																							
Total EPH	NA	NA	5300	43.3		26	26	572		26.2	26.2	141		24.7	24.7	478		28.1	28.1	239		24.5	24.5
Volatile Organic Compounds (VOCs)																							
Benzene	0.0094	2.2	3	ND		0.00071	0.00024	0.00072		0.00059	0.0002	ND		0.0005	0.00017	ND		0.00086	0.00029	ND		0.00078	0.00026
Total VOCs	NA	NA	NA	0	-	-	-	0.00072	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
VOC TICs																							
Total TIC Compounds	NA	NA	NA	-		-	-	-		-	-	0.024	J	0	0	-		-	-	-		-	-
Semivolatile Organic Compounds (SVOCs)																							
Acenaphthene	NA	NA	3600	0.015	J	0.14	0.015	0.9	J	1.5	0.16	0.057	J	0.14	0.015	0.48	J	0.78	0.082	0.3	J	0.7	0.073
Hexachlorobenzene	0.17	NA	0.43	ND		0.052	0.017	**ND**		**0.54**	**0.18**	ND		0.05	0.017	**ND**		**0.28**	**0.093**	**ND**		**0.25**	**0.083**
2,4-Dinitrotoluene	0.27	NA	0.8	ND		0.089	0.03	**ND**		**0.94**	**0.31**	ND		0.087	0.029	**ND**		**0.48**	**0.16**	**ND**		**0.44**	**0.14**
Fluoranthene	NA	NA	2400	0.62		0.11	0.02	26		1.1	0.22	1.7		0.1	0.02	11		0.58	0.11	7.4		0.52	0.1
Hexachlorobutadiene	0.17	NA	8.9	ND		0.067	0.022	**ND**		**0.7**	**0.24**	ND		0.065	0.022	**ND**		**0.36**	**0.12**	**ND**		**0.32**	**0.11**
Hexachloroethane	0.17	NA	17	ND		0.087	0.029	**ND**		**0.92**	**0.31**	ND		0.085	0.028	**ND**		**0.47**	**0.16**	**ND**		**0.42**	**0.14**
Naphthalene	19	5.7	2500	0.028	J	0.18	0.022	2.7		1.9	0.23	0.091	J	0.18	0.021	0.71	J	0.98	0.12	0.32	J	0.87	0.11
Nitrobenzene	0.17	7.5	160	ND		0.08	0.026	**ND**		**0.84**	**0.28**	ND		0.078	0.026	**ND**		**0.43**	**0.14**	**ND**		**0.39**	**0.13**
Bis(2-ethylhexyl)phthalate	14	NA	39	ND		0.18	0.018	0.64	J	1.9	0.2	0.11	J	0.18	0.018	0.65	J	0.98	0.1	0.43	J	0.87	0.091
Di-n-butylphthalate	NA	NA	6300	ND		0.18	0.016	ND		1.9	0.17	ND		0.18	0.016	ND		0.98	0.086	0.2	J	0.87	0.077
Benzo(a)anthracene	0.71	78000	5.1	0.31		0.06	0.02	**13**		0.64	0.21	**0.91**		0.059	0.02	**6.2**		0.33	0.11	**4.3**		0.29	0.098
Benzo(a)pyrene	NA	3500	0.51	**0.35**		0.13	0.044	**16**		1.4	0.46	**1**		0.13	0.043	**6.9**		0.71	0.24	**4.9**		0.64	0.21
Benzo(b)fluoranthene	NA	78000	5.1	0.42		0.045	0.015	**18**		0.48	0.16	1.2		0.044	0.015	**8.4**		0.24	0.081	**5.7**		0.22	0.073
Benzo(k)fluoranthene	NA	780000	51	0.14		0.038	0.012	5.4		0.4	0.13	0.4		0.037	0.012	2.5		0.2	0.068	1.6		0.18	0.061
Chrysene	NA	NA	510	0.34		0.11	0.018	12		1.1	0.19	0.92		0.1	0.018	5.8		0.58	0.1	4		0.52	0.09
Acenaphthylene	NA	NA	NA	0.068	J	0.14	0.02	4.1		1.5	0.21	0.28		0.14	0.02	1		0.78	0.11	0.73		0.7	0.098
Anthracene	NA	NA	18000	0.079	J	0.11	0.016	4.5		1.1	0.17	0.32		0.1	0.016	1.8		0.58	0.087	1.2		0.52	0.078
Benzo(ghi)perylene	NA	NA	NA	0.21		0.14	0.021	7.1		1.5	0.22	0.6		0.14	0.021	3.6		0.78	0.11	2.5		0.7	0.1
Fluorene	NA	NA	2400	0.026	J	0.18	0.017	2.7		1.9	0.18	0.085	J	0.18	0.017	0.83	J	0.98	0.094	0.41	J	0.87	0.084
Phenanthrene	NA	NA	NA	0.36		0.11	0.013	19		1.1	0.14	0.89		0.1	0.013	7.3		0.58	0.07	4.4		0.52	0.063
Dibenzo(a,h)anthracene	NA	7800	0.51	0.052	J	0.062	0.021	**1.7**		0.66	0.22	0.15		0.061	0.02	**0.83**		0.34	0.11	**0.62**		0.3	0.1
Indeno(1,2,3-cd)pyrene	NA	78000	5.1	0.22		0.075	0.025	**8.6**		0.8	0.26	0.69		0.074	0.024	4		0.41	0.14	2.8		0.37	0.12
Pyrene	NA	NA	1800	0.58		0.11	0.016	22		1.1	0.16	1.5		0.1	0.015	9.2		0.58	0.085	6.4		0.52	0.076
Dibenzofuran	NA	NA	NA	0.018	J	0.18	0.016	1.7	J	1.9	0.17	0.049	J	0.18	0.015	0.51	J	0.98	0.086	0.24	J	0.87	0.077
2-Methylnaphthalene	3.1	NA	240	ND		0.22	0.019	0.89	J	2.3	0.2	0.044	J	0.21	0.018	0.34	J	1.2	0.1	0.21	J	1	0.092
2,4-Dichlorophenol	0.19	NA	190	ND		0.086	0.029	**ND**		**0.91**	**0.3**	ND		0.084	0.028	**ND**		**0.47**	**0.16**	**ND**		**0.42**	**0.14**
2,4-Dinitrophenol	0.33	NA	130	ND		0.26	0.083	**ND**		**2.7**	**0.88**	ND		0.25	0.082	**ND**		**1.4**	**0.45**	**ND**		**1.2**	**0.41**
Pentachlorophenol	0.33	NA	1	ND		0.12	0.039	**ND**		**1.2**	**0.42**	ND		0.12	0.039	**ND**		**0.64**	**0.21**	**ND**		**0.58**	**0.19**
Phenol	21	39000	19000	ND		0.18	0.021	0.25	J	1.9	0.22	ND		0.18	0.021	ND		0.98	0.12	ND		0.87	0.1
Carbazole	NA	NA	NA	0.042	J	0.18	0.011	1.6	J	1.9	0.12	0.094	J	0.18	0.011	0.76	J	0.98	0.062	0.4	J	0.87	0.056
Benzaldehyde	NA	NA	170	ND		0.24	0.028	ND		2.5	0.3	0.088	J	0.23	0.027	ND		1.3	0.15	ND		1.2	0.14
Biphenyl	NA	NA	87	ND		0.41	0.023	0.27	J	4.3	0.25	ND		0.4	0.023	ND		2.2	0.13	ND		2	0.11
Atrazine	0.33	NA	220	ND		0.14	0.063	**ND**		**1.5**	**0.66**	ND		0.14	0.061	**ND**		**0.78**	**0.34**	**ND**		**0.7**	**0.31**
1,4-Dioxane	0.067	45	7	ND		0.027	0.0082	**ND**		**0.28**	**0.086**	ND		0.026	0.008	**ND**		**0.15**	**0.044**	**ND**		**0.13**	**0.04**
Total SVOCs	NA	NA	NA	3.878	-	-	-	169.05	-	-	-	11.178	-	-	-	72.81	-	-	-	49.06	-	-	-
SVOC TICs																							
Total TIC Compounds	NA	NA	NA	1.74	J	0	0	40.7	J	0	0	2.95	J	0	0	17	J	0	0	17.6	J	0	0
Pesticides																							
4,4'-DDE	0.47	NA	2	0.00398		0.00171	0.00039	0.0385	P	0.00176	0.0004	0.00861		0.00165	0.00038	0.0331		0.00184	0.00042	0.00303	IP	0.00167	0.00038
4,4'-DDD	0.47	NA	2.3	0.00074	JIP	0.00171	0.00061	ND		0.00176	0.00062	0.0033		0.00165	0.00058	0.003	IP	0.00184	0.00065	ND		0.00167	0.00059
4,4'-DDT	0.67	NA	1.9	0.0044		0.00321	0.00138	0.0415	P	0.00329	0.00141	0.00983		0.00309	0.00132	0.0425		0.00345	0.00148	ND		0.00314	0.00134
cis-Chlordane	1.4	NA	0.27	ND		0.00214	0.00059	ND		0.0022	0.00061	0.00397	IP	0.00206	0.00057	ND		0.0023	0.00064	ND		0.00209	0.00058
trans-Chlordane	1.4	NA	0.27	ND		0.00214	0.00056	ND		0.0022	0.00058	0.00259	IP	0.00206	0.00054	ND		0.0023	0.0006	ND		0.00209	0.00055
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1260	1.6	NA	0.25	0.0164	J	0.0363	0.00671	0.0908		0.0371	0.00686	0.0849		0.0335	0.00619	0.0419		0.0378	0.00698	0.0373		0.0342	0.00632
Aroclor 1268	1.6	NA	0.25	ND		0.0363	0.00376	0.0507		0.0371	0.00385	ND		0.0335	0.00347	0.0193	J	0.0378	0.00391	0.0177	J	0.0342	0.00355
PCBs, Total	1.6	NA	0.25	0.0164	J	0.0363	0.00322	0.142		0.0371	0.0033	0.0849		0.0335	0.00298	0.0612	J	0.0378	0.00336	0.055	J	0.0342	0.00304
Total Metals																							
Aluminum, Total	NA	NA	78000	3820		8.6	2.32	4710		8.86	2.39	2320		8.25	2.23	2800		9.49	2.56	3420		8.04	2.17
Antimony, Total	5.4	NA	31	2.17	J	4.3	0.327	0.992	J	4.43	0.336	1.33	J	4.12	0.313	3.92	J	4.75	0.361	2.03	J	4.02	0.306
Arsenic, Total	19	1100	19	9.33		0.86	0.179	7.28		0.886	0.184	3.41		0.825	0.172	8.87		0.949	0.197	5.7		0.804	0.167
Barium, Total	2100	870000	16000	234		0.86	0.15	69.4		0.886	0.154	120		0.825	0.143	292		0.949	0.165	212		0.804	0.14
Beryllium, Total	0.7	2000	160	0.31	J	0.43	0.028	0.31	J	0.443	0.029	0.132	J	0.412	0.027	0.19	J	0.475	0.031	0.298	J	0.402	0.027
Cadmium, Total	1.9	2600	71	1.41		0.86	0.084	0.956		0.886	0.087	0.676	J	0.825	0.081	1.74		0.949	0.093	1.36		0.804	0.079
Calcium, Total	NA	NA	NA	2630		8.6	3.01	2450		8.86	3.1	1040		8.25	2.89	3310		9.49	3.32	7450		8.04	2.82
Chromium, Total	NA	NA	NA	15.2		0.86	0.083	12.6		0.886	0.085	8.26		0.825	0.079	15.8		0.949	0.091	13.3		0.804	0.077
Cobalt, Total	90	520	23	6.37		1.72	0.143	2.93		1.77	0.147	1.65		1.65	0.137	2.87		1.9	0.158	1.96		1.61	0.134
Copper, Total	910	NA	3100	69.4		0.86	0.222	54.1		0.886	0.228	40.4		0.825	0.213	164		0.949	0.245	75		0.804	0.208
Iron, Total	NA	NA	NA	21100		4.3	0.777	11100		4.43	0.8	6850		4.12	0.745	13200		4.75	0.857	8030		4.02	0.726
Lead, Total	90	NA	400	**395**		4.3	0.23	**93.7**		4.43	0.237	**183**		4.12	0.221	**350**		4.75	0.254	**226**		4.02	0.216
Magnesium, Total	NA	NA	NA	503		8.6	1.32	1240		8.86	1.36	254		8.25	1.27	713		9.49	1.46	1300		8.04	1.24
Manganese, Total	NA	87000	1900	178		0.86	0.137	103		0.886	0.141	41.4		0.825	0.131	136		0.949	0.151	155		0.804	0.128
Mercury, Total	0.1	520000	23	**0.253**		0.074	0.048	**0.219**		0.077	0.05	**0.284**		0.071	0.046	**0.775**		0.083	0.054	**0.412**		0.069	0.045
Nickel, Total	48	20000	1600	14.1		2.15	0.208	6.13		2.21	0.214	4.19		2.06	0.2	10.7		2.37	0.23	7.13		2.01	0.195
Potassium, Total	NA	NA	NA	312		215	12.4	520		221	12.8	164	J	206	11.9	306		237	13.7	390		201	11.6
Selenium, Total	11	NA	390	0.387	J	1.72	0.222	0.292	J	1.77	0.228	ND		1.65	0.213	0.418	J	1.9	0.245	0.467	J	1.61	0.208
Silver, Total	0.5	NA	390	0.37	J	0.86	0.243	0.425	J	0.886	0.251	**ND**		**0.825**	**0.233**	**0.702**	J	0.949	0.269	0.386	J	0.804	0.228
Sodium, Total	NA	NA	NA	61.6	J	172	2.71	39.7	J	177	2.79	15.2	J	165	2.6	47.1	J	190	2.99	65.8	J	161	2.53
Vanadium, Total	NA	170000	390	45.2		0.86	0.175	19.6		0.886	0.18	11.6		0.825	0.167	14.8		0.949	0.193	12.2		0.804	0.163
Zinc, Total	930	NA	23000	362		4.3	0.252	104		4.43	0.259	126		4.12	0.242	468		4.75	0.278	282		4.02	0.236
General Chemistry																							
Solids, Total	NA	NA	NA	90.9		0.1	NA	87.6		0.1	NA	93.5		0.1	NA	83.6		0.1	NA	94.3		0.1	NA
Cyanide, Total	20	NA	47	ND		1	0.22	0.37	J	1.1	0.24	ND		1	0.21	1	J	1.2	0.25	0.26	J	0.98	0.21

All units are presented in milligrams per kilogram (mg/kg) unless stated otherwise
SS - Sample Specific Standard generated utilizing the 2021 NJDEP EPH Category II, Ingestion/Dermal Calculator
-- - Sample not analyzed for this parameter
J - Designates the concentration is below the Quantitation Limit (RL) but above the Method Detection Limit (MDL); therefore, the concentration is considered estimated.
P - Designates the relative percent difference (RPD) between the two gas chromatography results exceeds the method-specified criteria for this analyte.
NA - Standard not applicable because appropriate toxicological information does not exist, the groundwater remediation standard is a secondary standard, or the calculated health based criterion exceeds one million mg/kg or the soil saturation limit.
ND - Not Detected at the method detection limit (MDL).
RISRS - Residential Inhalation Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
RIDSRS - Residential Ingestion/Dermal Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
MGWSRS - Migration to Groundwater Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
Bold values and highlighted cells indicate the concentration exceeds the more stringent of the RISRS or RIDSRS
Bold and blue colored values indicate the concentration exceeds the MGWSRS
Red Bold values indicate the Method Detection Limit (MDL) is elevated and may exceed the applicable standards.

TABLE NO. 1
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY
17087.006 ROBERT B. JOHNSON PARK - CAP-IN-PLACE ASSESSMENT

SAMPLE ID:				CP-11				CP-12				CP-13				CP-14				CP-15			
LAB ID:				L2237235-11				L2237235-12				L2237235-13				L2237235-14				L2237235-15			
COLLECTION DATE:				7/12/2022				7/12/2022				7/12/2022				7/12/2022				7/12/2022			
SAMPLE DEPTH:				0.5-1.0'				0-0.5'				0.5-1.0'				0-0.5'				0-0.5'			
SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL				SOIL			
ANALYTE	**MGWSRS**	**RISRS**	**RIDSRS**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
Extractable Petroleum Hydrocarbons (EPH) Cat II																							
Total EPH	NA	NA	5300	50		25.6	25.6	202		25.3	25.3	491		23.8	23.8	167		26.3	26.3	442		27.7	27.7
Volatile Organic Compounds (VOCs)																							
Benzene	0.0094	2.2	3	ND		0.00062	0.0002	ND		0.00064	0.00021	0.0013		0.00052	0.00017	ND		0.00072	0.00024	ND		0.00082	0.00027
Toluene	7.8	NA	6300	ND		0.0012	0.00067	ND		0.0013	0.00069	0.00068	J	0.001	0.00056	ND		0.0014	0.00079	ND		0.0016	0.0009
Xylenes, Total	19	NA	12000	ND		0.0012	0.00036	ND		0.0013	0.00037	0.0019	J	0.001	0.0003	ND		0.0014	0.00042	ND		0.0016	0.00048
Styrene	2.1	NA	16000	ND		0.0012	0.00024	ND		0.0013	0.00025	0.00027	J	0.001	0.0002	ND		0.0014	0.00028	ND		0.0016	0.00032
Total VOCs	NA	NA	NA	0	-	-	-	0	-	-	-	0.00411	-	-	-	0.51	-	-	-	0	-	-	-
VOC TICs																							
Total TIC Compounds	NA	NA	NA	0		-	-	0.009	J	0	0	0.249	J	0	0	0.005	J	0	0	0		-	-
Semivolatile Organic Compounds (SVOCs)																							
Acenaphthene	NA	NA	3600	0.024	J	0.15	0.015	0.23	J	1.4	0.15	0.76	J	1.4	0.14	0.059	J	0.14	0.015	0.67	J	1.6	0.16
Hexachlorobenzene	0.17	NA	0.43	ND		0.053	0.018	ND		0.52	0.17	ND		0.49	0.16	ND		0.052	0.017	**ND**		**0.56**	**0.18**
2,4-Dinitrotoluene	0.27	NA	0.8	ND		0.091	0.03	**ND**		**0.9**	**0.3**	**ND**		**0.84**	**0.28**	ND		0.09	0.03	**ND**		**0.97**	**0.32**
Fluoranthene		NA	2400	1.3		0.11	0.021	11		1.1	0.21	18		1	0.19	2.4		0.11	0.021	34		1.2	0.22
Hexachlorobutadiene	0.17	NA	8.9	ND		0.068	0.023	**ND**		**0.67**	**0.22**	**ND**		**0.63**	**0.21**	ND		0.067	0.022	**ND**		**0.72**	**0.24**
Hexachloroethane	0.17	NA	17	ND		0.089	0.03	**ND**		**0.88**	**0.29**	**ND**		**0.82**	**0.27**	ND		0.088	0.029	**ND**		**0.95**	**0.32**
Naphthalene	19	5.7	2500	0.064	J	0.18	0.022	0.42	J	1.8	0.22	1.8		1.7	0.21	0.12	J	0.18	0.022	3.4		1.9	0.24
Nitrobenzene	0.17	7.5	160	ND		0.082	0.027	**ND**		**0.8**	**0.27**	**ND**		**0.75**	**0.25**	ND		0.08	0.027	**ND**		**0.86**	**0.29**
Bis(2-ethylhexyl)phthalate	14	NA	39	0.053	J	0.18	0.019	ND		1.8	0.19	0.61	J	1.7	0.18	0.27		0.18	0.019	0.68	J	1.9	0.2
Benzo(a)anthracene	0.71	78000	5.1	0.62		0.062	0.021	**4.9**		0.61	0.2	**9.9**		0.57	0.19	**1.2**		0.061	0.02	**18**		0.65	0.22
Benzo(a)pyrene	NA	3500	0.51	**0.71**		0.13	0.045	**4.2**		1.3	0.44	**11**		1.2	0.41	**1.3**		0.13	0.044	**21**		1.4	0.48
Benzo(b)fluoranthene	NA	78000	5.1	0.88		0.046	0.015	**4.9**		0.46	0.15	**13**		0.43	0.14	1.6		0.046	0.015	**24**		0.49	0.16
Benzo(k)fluoranthene	NA	780000	51	0.28		0.038	0.013	1.7		0.38	0.13	3.7		0.36	0.12	0.54		0.038	0.013	7		0.41	0.14
Chrysene	NA	NA	510	0.57		0.11	0.019	4.3		1.1	0.19	8.7		1	0.17	1.3		0.11	0.018	15		1.2	0.2
Acenaphthylene	NA	NA	NA	0.2		0.15	0.02	2.5		1.4	0.2	2.1		1.4	0.19	0.5		0.14	0.02	5.1		1.6	0.22
Anthracene	NA	NA	18000	0.17		0.11	0.016	2.2		1.1	0.16	3.3		1	0.15	0.41		0.11	0.016	6.4		1.2	0.17
Benzo(ghi)perylene	NA	NA		0.41		0.15	0.022	1.9		1.4	0.21	5.5		1.4	0.2	0.82		0.14	0.021	11		1.6	0.23
Fluorene	NA	NA	2400	0.05	J	0.18	0.018	0.84	J	1.8	0.17	1.7		1.7	0.16	0.11	J	0.18	0.017	3.2		1.9	0.19
Phenanthrene	NA	NA	NA	0.58		0.11	0.013	6.2		1.1	0.13	13		1	0.12	1		0.11	0.013	24		1.2	0.14
Dibenzo(a,h)anthracene	NA	7800	0.51	0.093		0.064	0.021	0.48	J	0.63	0.21	**1.5**		0.59	0.2	0.2		0.063	0.021	**2.3**		0.68	0.22
Indeno(1,2,3-cd)pyrene	NA	78000	5.1	0.46		0.077	0.026	2.4		0.76	0.25	**6.4**		0.71	0.24	0.92		0.076	0.025	**12**		0.82	0.27
Pyrene	NA	NA	1800	1.2		0.11	0.016	8.2		1.1	0.16	15		1	0.15	2.2		0.11	0.016	29		1.2	0.17
Dibenzofuran	NA	NA	NA	0.026	J	0.18	0.016	0.34	J	1.8	0.16	1.1	J	1.7	0.15	0.054	J	0.18	0.016	1.8	J	1.9	0.17
2-Methylnaphthalene	3.1	NA	240	0.021	J	0.22	0.019	ND		2.2	0.19	0.69	J	2	0.18	0.05	J	0.22	0.019	1.2	J	2.3	0.21
2,4-Dichlorophenol	0.19	NA	190	ND		0.088	0.03	**ND**		**0.87**	**0.29**	**ND**		**0.81**	**0.27**	ND		0.087	0.029	**ND**		**0.93**	**0.31**
2,4-Dinitrophenol	0.33	NA	130	ND		0.26	0.086	**ND**		**2.6**	**0.84**	**ND**		**2.4**	**0.79**	ND		0.26	0.084	**ND**		**2.8**	**0.91**
Pentachlorophenol	0.33	NA	1	ND		0.12	0.04	**ND**		**1.2**	**0.4**	**ND**		**1.1**	**0.37**	ND		0.12	0.04	**ND**		**1.3**	**0.43**
Carbazole	NA	NA	NA	0.049	J	0.18	0.012	0.26	J	1.8	0.12	1.3	J	1.7	0.11	0.094	J	0.18	0.012	2.1		1.9	0.12
Benzaldehyde	NA	NA	170	ND		0.24	0.029	ND		2.4	0.28	ND		2.2	0.26	0.21	J	0.24	0.028	ND		2.6	0.3
Biphenyl	NA	NA	87	ND		0.42	0.024	ND		4.1	0.24	ND		3.9	0.22	ND		0.41	0.023	0.46	J	4.4	0.25
Atrazine	0.33	NA	220	ND		0.15	0.064	**ND**		**1.4**	**0.63**	**ND**		**1.4**	**0.59**	ND		0.14	0.063	**ND**		**1.6**	**0.68**
1,4-Dioxane	0.067	45	7	ND		0.028	0.0084	**ND**		**0.27**	**0.082**	**ND**		**0.25**	**0.077**	ND		0.027	0.0082	**ND**		**0.29**	**0.089**
Total SVOCs	NA	NA	NA	7.76	-	-	-	56.97	-	-	-	119.06	-	-	-	15.4	-	-	-	222.61	-	-	-
SVOC TICs																							
Total TIC Compounds	NA	NA	NA	2.39	J	0	0	7.09	J	0	0	26.6	J	0	0	6.16	J	0	0	51.8	J	0	0
Pesticides																							
Heptachlor epoxide	0.081	NA	0.076	ND		0.00331	0.00099	ND		0.00322	0.00096	ND		0.00298	0.00089	ND		0.00326	0.00097	0.00229	JIP	0.00343	0.00103
4,4'-DDE	0.47	NA	2	0.00761		0.00176	0.0004	0.0118		0.00172	0.00039	0.0063		0.00159	0.00036	0.039		0.00174	0.0004	0.0141	IP	0.00183	0.00042
4,4'-DDD	0.47	NA	2.3	0.00166	JP	0.00176	0.00062	0.0022	IP	0.00172	0.00061	ND		0.00159	0.00056	0.00502		0.00174	0.00062	ND		0.00183	0.00065
4,4'-DDT	0.67	NA	1.9	0.00587		0.00331	0.00142	0.0174		0.00322	0.00138	0.0204		0.00298	0.00128	0.0606		0.00326	0.0014	0.0383		0.00343	0.00147
cis-Chlordane	1.4	NA	0.27	ND		0.0022	0.00061	0.00148	JIP	0.00214	0.00059	ND		0.00198	0.00055	0.00187	JIP	0.00217	0.0006	ND		0.00229	0.00063
trans-Chlordane	1.4	NA	0.27	ND		0.0022	0.00058	ND		0.00214	0.00056	ND		0.00198	0.00052	0.00079	JIP	0.00217	0.00057	ND		0.00229	0.0006
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1260	1.6	NA	0.25	0.0103	J	0.0372	0.00687	0.0223	J	0.0353	0.00652	0.0343		0.034	0.00629	0.136		0.0351	0.00648	0.0398		0.0373	0.00689
Aroclor 1268	1.6	NA	0.25	0.00465	JP	0.0372	0.00385	0.00547	J	0.0353	0.00365	0.0203	J	0.034	0.00353	ND		0.0351	0.00363	0.0228	J	0.0373	0.00386
PCBs, Total	1.6	NA	0.25	0.015	J	0.0372	0.0033	0.0278	J	0.0353	0.00313	0.0546	J	0.034	0.00302	0.136		0.0351	0.00311	0.0626	J	0.0373	0.00331
Total Metals																							
Aluminum, Total	NA	NA	78000	6430		8.84	2.39	2260		8.61	2.32	3610		8.25	2.23	2190		8.34	2.25	2650		9.04	2.44
Antimony, Total	5.4	NA	31	1.07	J	4.42	0.336	1.31	J	4.3	0.327	3.76	J	4.12	0.313	0.709	J	4.17	0.317	2.89	J	4.52	0.344
Arsenic, Total	19	1100	19	4.33		0.884	0.184	4.58		0.861	0.179	10.1		0.825	0.172	3.83		0.834	0.173	8.77		0.904	0.188
Barium, Total	2100	870000	16000	27.5		0.884	0.154	112		0.861	0.15	304		0.825	0.144	36.9		0.834	0.145	176		0.904	0.157
Beryllium, Total	0.7	2000	160	0.133	J	0.442	0.029	0.155	J	0.43	0.028	0.322	J	0.412	0.027	0.158	J	0.417	0.028	0.253	J	0.452	0.03
Cadmium, Total	1.9	2600	71	0.442	J	0.884	0.087	0.723	J	0.861	0.084	**2.42**		0.825	0.081	0.509	J	0.834	0.082	1.34		0.904	0.089
Calcium, Total	NA	NA	NA	788		8.84	3.09	1720		8.61	3.01	13700		8.25	2.89	1210		8.34	2.92	1390		9.04	3.16
Chromium, Total	NA	NA	NA	12		0.884	0.085	9.05		0.861	0.083	15.6		0.825	0.079	7.6		0.834	0.08	11.9		0.904	0.087
Cobalt, Total	90	520	23	0.778	J	1.77	0.147	1.53	J	1.72	0.143	2.68		1.65	0.137	1.3	J	1.67	0.138	2.6		1.81	0.15
Copper, Total	910	NA	3100	12.4		0.884	0.228	28.4		0.861	0.222	127		0.825	0.213	19.4		0.834	0.215	78.2		0.904	0.233
Iron, Total	NA	NA	NA	9870		4.42	0.798	8380		4.3	0.777	14400		4.12	0.745	5930		4.17	0.753	13200		4.52	0.816
Lead, Total	90	NA	400	33.6		4.42	0.237	**180**		4.3	0.231	**388**		4.12	0.221	56		4.17	0.223	**268**		4.52	0.242
Magnesium, Total	NA	NA	NA	208		8.84	1.36	645		8.61	1.32	1010		8.25	1.27	375		8.34	1.28	443		9.04	1.39
Manganese, Total	NA	87000	1900	21.5		0.884	0.14	77.3		0.861	0.137	197		0.825	0.131	50.3		0.834	0.132	121		0.904	0.144
Mercury, Total	0.1	520000	23	**0.118**		0.073	0.047	**0.17**		0.074	0.048	**0.521**		0.068	0.045	**0.119**		0.07	0.045	**0.284**		0.085	0.055
Nickel, Total	48	20000	1600	2.72		2.21	0.214	4.32		2.15	0.208	7.94		2.06	0.2	3.01		2.08	0.202	8.92		2.26	0.219
Potassium, Total	NA	NA	NA	173	J	221	12.7	422		215	12.4	368		206	11.9	254		208	12	375		226	13
Selenium, Total	11	NA	390	ND		1.77	0.228	ND		1.72	0.222	0.371	J	1.65	0.213	ND		1.67	0.215	0.262	J	1.81	0.233
Silver, Total	0.5	NA	390	**ND**		**0.884**	**0.25**	**ND**		**0.861**	**0.244**	0.371	J	0.825	0.233	**ND**		**0.834**	**0.236**	0.298	J	0.904	0.256
Sodium, Total	NA	NA	NA	10.3	J	177	2.78	10.1	J	172	2.71	61.8	J	165	2.6	15	J	167	2.63	29.6	J	181	2.85
Vanadium, Total	NA	170000	390	18.2		0.884	0.179	12.9		0.861	0.175	15.9		0.825	0.167	10.4		0.834	0.169	18.3		0.904	0.184
Zinc, Total	930	NA	23000	26.4		4.42	0.259	127		4.3	0.252	390		4.12	0.242	69.2		4.17	0.244	205		4.52	0.265
General Chemistry																							
Solids, Total	NA	NA	NA	88.5		0.1	NA	91.1		0.1	NA	95.6		0.1	NA	90.5		0.1	NA	85.2		0.1	NA
Cyanide, Total	20	NA	47	ND		1.1	0.22	ND		1.1	0.23	0.4	J	1	0.22	ND		1.1	0.23	0.67	J	1.1	0.24

All units are presented in milligrams per kilogram (mg/kg) unless stated otherwise
SS - Sample Specific Standard generated utilizing the 2021 NJDEP EPH Category II, Ingestion/Dermal Calculator
-- - Sample not analyzed for this parameter
J - Designates the concentration is below the Quantitation Limit (RL) but above the Method Detection Limit (MDL); therefore, the concentration is considered estimated.
P - Designates the relative percent difference (RPD) between the two gas chromatography results exceeds the method-specified criteria for this analyte.
NA - Standard not applicable because appropriate toxicological information does not exist, the groundwater remediation standard is a secondary standard, or the calculated health based criterion exceeds one million mg/kg or the soil saturation limit.
ND - Not Detected at the method detection limit (MDL).
RISRS - Residential Inhalation Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
RIDSRS - Residential Ingestion/Dermal Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
MGWSRS - Migration to Groundwater Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
Bold values and highlighted cells indicate the concentration exceeds the more stringent of the RISRS or RIDSRS
Bold and blue colored values indicate the concentration exceeds the MGWSRS
Red Bold values indicate the Method Detection Limit (MDL) is elevated and may exceed the applicable standards.

TABLE NO. 1
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY
17087.006 ROBERT B. JOHNSON PARK - CAP-IN-PLACE ASSESSMENT

SAMPLE ID:				CP-16				CP-17				CP-18				CP-19				CP-20			
LAB ID:				L2237235-16				L2237235-17				L2237235-18				L2237235-19				L2237235-20			
COLLECTION DATE:				7/12/2022				7/12/2022				7/12/2022				7/12/2022				7/12/2022			
SAMPLE DEPTH:				0.5-1.0'				0.5-1.0'				0.5-1.0'				0-0.5'				0-0.5'			
SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL				SOIL			
ANALYTE	**MGWSRS**	**RISRS**	**RIDSRS**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
Extractable Petroleum Hydrocarbons (EPH) Cat II																							
Total EPH	NA	NA	5300	116		25	25	304		25.5	25.5	106		25.2	25.2	291		24.8	24.8	625		25.1	25.1
Volatile Organic Compounds (VOCs)																							
Methylene chloride	0.013	1400	50	0.0081		0.0054	0.0025	ND		0.0059	0.0027	ND		0.0055	0.0025	ND		0.0073	0.0033	ND		0.0069	0.0032
Chloroform	0.33	590	780	0.00027	J	0.0016	0.00015	ND		0.0018	0.00016	ND		0.0016	0.00015	ND		0.0022	0.0002	ND		0.0021	0.00019
Tetrachloroethene	0.0086	47	330	0.00082		0.00054	0.00021	ND		0.00059	0.00023	ND		0.00055	0.00021	ND		0.00073	0.00029	ND		0.00069	0.00027
Toluene	7.8	NA	6300	0.0018		0.0011	0.00059	ND		0.0012	0.00064	ND		0.0011	0.00059	ND		0.0014	0.00079	ND		0.0014	0.00075
Ethylbenzene	15	10	7800	0.00021	J	0.0011	0.00015	ND		0.0012	0.00016	ND		0.0011	0.00015	ND		0.0014	0.0002	ND		0.0014	0.0002
trans-1,2-Dichloroethene	0.56	NA	1300	0.00023	J	0.0016	0.00015	ND		0.0018	0.00016	ND		0.0016	0.00015	ND		0.0022	0.0002	ND		0.0021	0.00019
Trichloroethene	0.0065	3	15	0.00016	J	0.00054	0.00015	ND		0.00059	0.00016	ND		0.00055	0.00015	ND		0.00073	0.0002	ND		0.00069	0.00019
Xylenes, Total	19	NA	12000	0.00061	J	0.0011	0.00032	ND		0.0012	0.00034	ND		0.0011	0.00032	ND		0.0014	0.00042	ND		0.0014	0.0004
1,2-Dichloroethene, Total	NA	NA	NA	0.00023	J	0.0011	0.00015	ND		0.0012	0.00016	ND		0.0011	0.00015	ND		0.0014	0.0002	ND		0.0014	0.00019
Isopropylbenzene	22	NA	7800	0.00021	J	0.0011	0.00012	ND		0.0012	0.00013	ND		0.0011	0.00012	ND		0.0014	0.00016	ND		0.0014	0.00015
Total VOCs	NA	NA	NA	0.01241	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
VOC TICs																							
Total TIC Compounds	NA	NA	NA	0.009	J	0	0	0		-	-	0		-	-	0		-	-	0.011	J	0	0
Semivolatile Organic Compounds (SVOCs)																							
Acenaphthene	NA	NA	3600	0.29	J	0.71	0.074	0.94	J	1.4	0.15	0.078	J	0.14	0.015	0.13	J	0.14	0.015	1.3	J	1.4	0.14
2,4-Dinitrotoluene	0.27	NA	0.8	**ND**		**0.44**	**0.15**	**ND**		**0.87**	**0.29**	ND		0.091	0.03	ND		0.088	0.029	**ND**		**0.86**	**0.29**
Fluoranthene	NA	NA	2400	8.1		0.53	0.1	18		1	0.2	2.9		0.11	0.021	4.6		0.11	0.02	24		1	0.2
Hexachlorobutadiene	0.17	NA	8.9	**ND**		**0.33**	**0.11**	**ND**		**0.65**	**0.22**	ND		0.068	0.022	ND		0.066	0.022	**ND**		**0.64**	**0.22**
Hexachloroethane	0.17	NA	17	**ND**		**0.43**	**0.14**	**ND**		**0.85**	**0.28**	ND		0.088	0.029	ND		0.086	0.029	**ND**		**0.84**	**0.28**
Naphthalene	19	5.7	2500	0.36	J	0.89	0.11	0.44	J	1.8	0.21	0.17	J	0.18	0.022	0.27		0.18	0.022	0.97	J	1.7	0.21
Nitrobenzene	0.17	7.5	160	**ND**		**0.4**	**0.13**	**ND**		**0.78**	**0.26**	ND		0.081	0.027	ND		0.078	0.026	**ND**		**0.77**	**0.26**
Bis(2-ethylhexyl)phthalate	14	NA	39	0.99		0.89	0.092	0.75	J	1.8	0.18	0.12	J	0.18	0.019	0.17	J	0.18	0.018	0.61	J	1.7	0.18
Butyl benzyl phthalate	29	NA	290	ND		0.89	0.12	1.3	J	1.8	0.23	ND		0.18	0.024	ND		0.18	0.024	ND		1.7	0.23
Benzo(a)anthracene	0.71	78000	5.1	**5**		0.3	0.1	**10**		0.59	0.2	**1.4**		0.061	0.02	**2.2**		0.059	0.02	**13**		0.58	0.2
Benzo(a)pyrene	NA	3500	0.51	**5.3**		0.65	0.22	**11**		1.3	0.43	**1.6**		0.13	0.044	**2.4**		0.13	0.043	**14**		1.3	0.42
Benzo(b)fluoranthene	NA	78000	5.1	**6.3**		0.22	0.074	**14**		0.44	0.15	1.8		0.046	0.015	**2.8**		0.044	0.015	**17**		0.44	0.14
Benzo(k)fluoranthene	NA	780000	51	1.8		0.19	0.062	4.4		0.37	0.12	0.69		0.038	0.013	1		0.037	0.012	5.6		0.36	0.12
Chrysene	NA	NA	510	4.8		0.53	0.092	9.3		1	0.18	1.4		0.11	0.019	2.1		0.11	0.018	12		1	0.18
Acenaphthylene	NA	NA	NA	0.57	J	0.71	0.1	1.2	J	1.4	0.2	0.49		0.14	0.02	0.9		0.14	0.02	1.3	J	1.4	0.19
Anthracene	NA	NA	18000	1.2		0.53	0.079	2.9		1	0.16	0.43		0.11	0.016	0.81		0.11	0.016	3.5		1	0.15
Benzo(ghi)perylene	NA	NA		2.6		0.71	0.1	5.8		1.4	0.21	0.91		0.14	0.021	1.5		0.14	0.021	7.3		1.4	0.2
Fluorene	NA	NA	2400	0.42	J	0.89	0.086	1	J	1.8	0.17	0.12	J	0.18	0.018	0.25		0.18	0.017	1.3	J	1.7	0.17
Phenanthrene	NA	NA	NA	4.8		0.53	0.064	11		1	0.12	1.4		0.11	0.013	2.4		0.11	0.013	14		1	0.12
Dibenzo(a,h)anthracene	NA	7800	0.51	**0.73**		0.31	0.1	**1.7**		0.61	0.2	0.21		0.063	0.021	0.34		0.062	0.02	**2.1**		0.6	0.2
Indeno(1,2,3-cd)pyrene	NA	78000	5.1	3		0.37	0.12	**7**		0.74	0.24	1		0.076	0.025	1.7		0.074	0.025	**9**		0.73	0.24
Pyrene	NA	NA	1800	7.4		0.53	0.077	15		1	0.15	2.5		0.11	0.016	3.9		0.11	0.015	20		1	0.15
Dibenzofuran	NA	NA	NA	0.2	J	0.89	0.079	0.62	J	1.8	0.15	0.068	J	0.18	0.016	0.14	J	0.18	0.016	0.82	J	1.7	0.15
2-Methylnaphthalene	3.1	NA	240	0.37	J	1.1	0.094	0.25	J	2.1	0.18	0.057	J	0.22	0.019	0.11	J	0.21	0.019	0.49	J	2.1	0.18
2,4-Dichlorophenol	0.19	NA	190	**ND**		**0.43**	**0.14**	**ND**		**0.84**	**0.28**	ND		0.087	0.029	ND		0.085	0.028	**ND**		**0.83**	**0.28**
2,4-Dinitrophenol	0.33	NA	130	**ND**		**1.3**	**0.42**	**ND**		**2.5**	**0.82**	ND		0.26	0.085	ND		0.25	0.082	**ND**		**2.5**	**0.81**
Pentachlorophenol	0.33	NA	1	**ND**		**0.59**	**0.2**	**ND**		**1.2**	**0.38**	ND		0.12	0.04	ND		0.12	0.039	**ND**		**1.1**	**0.38**
3-Methylphenol/4-Methylphenol	0.75	NA	630	**ND**		**1.3**	**0.13**	**ND**		**2.5**	**0.25**	ND		0.26	0.026	ND		0.25	0.026	0.37	J	2.5	0.25
Carbazole	NA	NA	NA	0.37	J	0.89	0.057	1.2	J	1.8	0.11	0.13	J	0.18	0.012	0.19		0.18	0.011	1.7		1.7	0.11
Benzaldehyde	NA	NA	170	0.2	J	1.2	0.14	ND		2.3	0.27	ND		0.24	0.028	0.17	J	0.23	0.028	ND		2.3	0.27
Biphenyl	NA	NA	87	0.16	J	2	0.12	ND		4	0.23	ND		0.41	0.024	0.027	J	0.4	0.023	ND		4	0.22
Atrazine	0.33	NA	220	**ND**		**0.71**	**0.31**	**ND**		**1.4**	**0.61**	ND		0.14	0.064	ND		0.14	0.062	**ND**		**1.4**	**0.61**
1,4-Dioxane	0.067	45	7	**ND**		**0.13**	**0.041**	**ND**		**0.26**	**0.08**	ND		0.027	0.0083	ND		0.026	0.0081	**ND**		**0.26**	**0.079**
Total SVOCs	NA	NA	NA	54.96	-	-	-	117.8	-	-	-	17.473	-	-	-	28.107	-	-	-	153.56	-	-	-
SVOC TICs																							
Total TIC Compounds	NA	NA	NA	14.6	J	0	0	25.8	J	0	0	4.18	J	0	0	11.4	J	0	0	43.8	J	0	0
Pesticides																							
Beta-BHC	0.0046	NA	0.3	ND		0.00168	0.00063	ND		0.00162	0.00061	ND		0.00172	0.00065	ND		0.0017	0.00064	**ND**		**0.0162**	**0.00614**
4,4'-DDE	0.47	NA	2	0.00428		0.00168	0.00039	0.0173	P	0.00162	0.00037	0.0364		0.00172	0.00039	0.0134		0.0017	0.00039	ND		0.0162	0.00374
4,4'-DDD	0.47	NA	2.3	ND		0.00168	0.0006	ND		0.00162	0.00057	0.0049		0.00172	0.00061	0.00176	IP	0.0017	0.0006	ND		0.0162	0.00577
4,4'-DDT	0.67	NA	1.9	ND		0.00316	0.00135	0.0359		0.00303	0.0013	0.0313		0.00323	0.00138	0.0224		0.0032	0.00137	0.054		0.0303	0.013
cis-Chlordane	1.4	NA	0.27	ND		0.00211	0.00058	ND		0.00202	0.00056	ND		0.00215	0.0006	0.00246	IP	0.00213	0.00059	ND		0.0202	0.00564
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1260	1.6	NA	0.25	0.0206	J	0.0356	0.00657	0.0377		0.0343	0.00634	0.0436		0.035	0.00647	0.0327	J	0.0346	0.00639	0.0202	J	0.0349	0.00644
Aroclor 1268	1.6	NA	0.25	0.00633	J	0.0356	0.00368	0.0133	J	0.0343	0.00355	0.0159	J	0.035	0.00362	0.0111	J	0.0346	0.00358	0.0179	J	0.0349	0.00361
PCBs, Total	1.6	NA	0.25	0.0269	J	0.0356	0.00316	0.051	J	0.0343	0.00304	0.0595	J	0.035	0.00311	0.0438	J	0.0346	0.00307	0.0381	J	0.0349	0.0031
Total Metals																							
Aluminum, Total	NA	NA	78000	4490		8.49	2.29	3760		8.42	2.27	3510		8.47	2.29	2710		8.16	2.2	4260		8.33	2.25
Antimony, Total	5.4	NA	31	2.29	J	4.24	0.322	2.26	J	4.21	0.32	1.74	J	4.23	0.322	0.914	J	4.08	0.31	1.42	J	4.16	0.316
Arsenic, Total	19	1100	19	13.3		0.849	0.176	8.23		0.842	0.175	7.81		0.847	0.176	5.69		0.816	0.17	7.86		0.833	0.173
Barium, Total	2100	870000	16000	202		0.849	0.148	208		0.842	0.146	120		0.847	0.147	97.7		0.816	0.142	446		0.833	0.145
Beryllium, Total	0.7	2000	160	0.263	J	0.424	0.028	0.295	J	0.421	0.028	0.229	J	0.423	0.028	0.212	J	0.408	0.027	0.358	J	0.416	0.028
Cadmium, Total	1.9	2600	71	1.2		0.849	0.083	1.68		0.842	0.083	0.999		0.847	0.083	0.898		0.816	0.08	1.49		0.833	0.082
Calcium, Total	NA	NA	NA	23100		8.49	2.97	15000		8.42	2.95	1610		8.47	2.96	2500		8.16	2.86	8840		8.33	2.92
Chromium, Total	NA	NA	NA	13.9		0.849	0.082	13.3		0.842	0.081	21.6		0.847	0.081	12.6		0.816	0.078	17.5		0.833	0.08
Cobalt, Total	90	520	23	2.97		1.7	0.141	2.86		1.68	0.14	1.98		1.69	0.14	2.6		1.63	0.136	3.61		1.66	0.138
Copper, Total	910	NA	3100	53.6		0.849	0.219	79.4		0.842	0.217	75.4		0.847	0.218	42.9		0.816	0.211	93		0.833	0.215
Iron, Total	NA	NA	NA	12000		4.24	0.766	14100		21	3.8	10100		4.23	0.765	9490		4.08	0.737	12400		4.16	0.752
Lead, Total	90	NA	400	**206**		4.24	0.228	**349**		4.21	0.226	**164**		4.23	0.227	**126**		4.08	0.219	**440**		4.16	0.223
Magnesium, Total	NA	NA	NA	767		8.49	1.31	1490		8.42	1.3	519		8.47	1.3	854		8.16	1.26	1290		8.33	1.28
Manganese, Total		87000	1900	124		0.849	0.135	220		0.842	0.134	79.2		0.847	0.135	79.4		0.816	0.13	188		0.833	0.132
Mercury, Total	0.1	520000	23	**0.391**		0.077	0.05	**0.64**		0.076	0.05	**0.338**		0.071	0.046	**0.306**		0.079	0.052	**0.879**		0.073	0.048
Nickel, Total	48	20000	1600	6.57		2.12	0.205	8.7		2.1	0.204	6.89		2.12	0.205	6.09		2.04	0.198	9.48		2.08	0.202
Potassium, Total	NA	NA	NA	354		212	12.2	429		210	12.1	463		212	12.2	493		204	11.8	403		208	12
Selenium, Total	11	NA	390	0.713	J	1.7	0.219	ND		1.68	0.217	0.246	J	1.69	0.218	ND		1.63	0.211	0.341	J	1.66	0.215
Silver, Total	0.5	NA	390	**0.688**	J	0.849	0.24	**0.505**	J	0.842	0.238	0.364	J	0.847	0.24	**ND**		**0.816**	**0.231**	0.325	J	0.833	0.236
Sodium, Total	NA	NA	NA	338		170	2.67	84.6	J	168	2.65	36.2	J	169	2.67	61.9	J	163	2.57	86.5	J	166	2.62
Vanadium, Total	NA	170000	390	18.6		0.849	0.172	16.2		0.842	0.171	18.9		0.847	0.172	16		0.816	0.166	16.8		0.833	0.169
Zinc, Total	930	NA	23000	224		4.24	0.249	345		4.21	0.247	163		4.23	0.248	124		4.08	0.239	331		4.16	0.244
General Chemistry																							
Solids, Total	NA	NA	NA	91.6		0.1	NA	93.7		0.1	NA	90.9		0.1	NA	92.1		0.1	NA	93.8		0.1	NA
Cyanide, Total	20	NA	47	0.24	J	1.1	0.23	ND		1	0.22	ND		1	0.22	ND		1.1	0.23	0.66	J	1	0.21

All units are presented in milligrams per kilogram (mg/kg) unless stated otherwise
SS - Sample Specific Standard generated utilizing the 2021 NJDEP EPH Category II, Ingestion/Dermal Calculator
-- - Sample not analyzed for this parameter
J - Designates the concentration is below the Quantitation Limit (RL) but above the Method Detection Limit (MDL); therefore, the concentration is considered estimated.
P - Designates the relative percent difference (RPD) between the two gas chromatography results exceeds the method-specified criteria for this analyte.
NA - Standard not applicable because appropriate toxicological information does not exist, the groundwater remediation standard is a secondary standard, or the calculated health based criterion exceeds one million mg/kg or the soil saturation limit.
ND - Not Detected at the method detection limit (MDL).
RISRS - Residential Inhalation Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
RIDSRS - Residential Ingestion/Dermal Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
MGWSRS - Migration to Groundwater Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
Bold values and highlighted cells indicate the concentration exceeds the more stringent of the RISRS or RIDSRS
Bold and blue colored values indicate the concentration exceeds the MGWSRS
Red Bold values indicate the Method Detection Limit (MDL) is elevated and may exceed the applicable standards.

TABLE NO. 1
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY
17087.006 ROBERT B. JOHNSON PARK - CAP-IN-PLACE ASSESSMENT

SAMPLE ID:				CP-21				CP-22				CP-23				CP-24				CP-25				CP-26			
LAB ID:				L2237235-21				L2237235-22				L2237235-23				L2237235-24				L2237235-25				L2237235-26			
COLLECTION DATE:				7/12/2022				7/12/2022				7/12/2022				7/12/2022				7/12/2022				7/12/2022			
SAMPLE DEPTH:				0.5-1.0'				0.5-1.0'				0-0.5'				0-0.5'				0-0.5'				0-0.5'			
SAMPLE MATRIX:				SOIL				SOIL				SOIL				SOIL				SOIL				SOIL			
ANALYTE	**MGWSRS**	**RISRS**	**RIDSRS**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
Extractable Petroleum Hydrocarbons (EPH) Cat II																											
Total EPH	NA	NA	5300	1180		26.1	26.1	89.8		24.7	24.7	389		27	27	915		25.1	25.1	97.9		25.6	25.6	268		25.6	25.6
Volatile Organic Compounds (VOCs)																											
Total VOCs	NA	NA	NA	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
VOC TICS																											
No Tentatively Identified Compounds	NA	NA	NA	ND		0	0	ND		0	0	ND		0	0	ND		0	0	ND		0	0	ND		0	0
Semivolatile Organic Compounds (SVOCs)																											
Acenaphthene	NA	NA	3600	1.5		1.5	0.16	0.67		0.14	0.014	0.24		0.16	0.016	0.79	J	1.4	0.14	ND		0.14	0.015	0.04	J	0.14	0.015
2,4-Dinitrotoluene	0.27	NA	0.8	**ND**		**0.92**	**0.31**	ND		0.086	0.029	ND		0.099	0.033	**ND**		**0.86**	**0.29**	ND		0.088	0.029	ND		0.09	0.03
Fluoranthene	NA	NA	2400	41		1.1	0.21	4.5		0.1	0.02	12		1.2	0.23	34		1	0.2	0.43		0.11	0.02	1.6		0.11	0.021
Hexachlorobutadiene	0.17	NA	8.9	**ND**		**0.69**	**0.23**	ND		0.064	0.022	ND		0.074	0.024	**ND**		**0.64**	**0.21**	ND		0.066	0.022	ND		0.068	0.022
Hexachloroethane	0.17	NA	17	**ND**		**0.9**	**0.3**	ND		0.084	0.028	ND		0.096	0.032	**ND**		**0.84**	**0.28**	ND		0.086	0.029	ND		0.088	0.029
Naphthalene	19	5.7	2500	2.8		1.8	0.23	0.63		0.17	0.021	0.57		0.2	0.024	4.6		1.7	0.21	0.035	J	0.18	0.022	0.1	J	0.18	0.022
Nitrobenzene	0.17	7.5	160	**ND**		**0.82**	**0.28**	ND		0.077	0.026	ND		0.088	0.029	**ND**		**0.77**	**0.26**	ND		0.079	0.026	ND		0.081	0.027
Bis(2-ethylhexyl)phthalate	14	NA	39	0.66	J	1.8	0.19	ND		0.17	0.018	0.11	J	0.2	0.02	0.64	J	1.7	0.18	0.41		0.18	0.018	0.24		0.18	0.019
Butyl benzyl phthalate	29	NA	290	ND		1.8	0.25	0.12	J	0.17	0.023	ND		0.2	0.026	ND		1.7	0.23	0.08	J	0.18	0.024	0.083	J	0.18	0.024
Di-n-octylphthalate	NA	NA	630	ND		1.8	0.58	ND		0.17	0.054	ND		0.2	0.062	ND		1.7	0.54	ND		0.18	0.055	0.079	J	0.18	0.057
Benzo(a)anthracene	0.71	78000	5.1	**21**		0.62	0.21	**2.6**		0.058	0.02	**5.8**		0.066	0.022	**17**		0.58	0.19	0.3		0.06	0.02	**0.98**		0.061	0.02
Benzo(a)pyrene	NA	3500	0.51	**22**		1.4	0.45	**1.9**		0.13	0.042	**5.3**		0.14	0.048	**20**		1.3	0.42	**0.34**		0.13	0.043	**1.1**		0.13	0.044
Benzo(b)fluoranthene	NA	78000	5.1	**26**		0.47	0.16	**2.4**		0.044	0.014	**6.4**		0.05	0.016	**23**		0.44	0.14	0.4		0.045	0.015	1.4		0.046	0.015
Benzo(k)fluoranthene	NA	780000	51	8		0.39	0.13	0.66		0.036	0.012	1.8		0.042	0.014	6.3		0.36	0.12	0.12		0.037	0.012	0.46		0.038	0.013
Chrysene	NA	NA	510	18		1.1	0.19	2.3		0.1	0.018	4.7		0.12	0.02	15		1	0.18	0.25		0.11	0.018	0.88		0.11	0.019
Acenaphthylene	NA	NA	NA	6.1		1.5	0.21	0.38		0.14	0.019	2.1		0.16	0.022	5.6		1.4	0.19	0.1	J	0.14	0.02	0.34		0.14	0.02
Anthracene	NA	NA	18000	9.2		1.1	0.16	1.8		0.1	0.015	2.2		0.12	0.018	7.8		1	0.15	0.08	J	0.11	0.016	0.3		0.11	0.016
Benzo(ghi)perylene	NA	NA	NA	11		1.5	0.22	0.75		0.14	0.02	2.9		0.16	0.023	11		1.4	0.2	0.2		0.14	0.021	0.71		0.14	0.021
Fluorene	NA	NA	2400	4.5		1.8	0.18	0.92		0.17	0.017	0.83		0.2	0.019	4		1.7	0.17	0.02	J	0.18	0.017	0.073	J	0.18	0.017
Phenanthrene	NA	NA	NA	33		1.1	0.13	5.7		0.1	0.012	7.1		0.12	0.014	27		1	0.12	0.19		0.11	0.013	0.73		0.11	0.013
Dibenzo(a,h)anthracene	NA	7800	0.51	**3**		0.65	0.21	0.27		0.06	0.02	**0.73**		0.069	0.023	**2.5**		0.6	0.2	0.051	J	0.062	0.02	0.17		0.063	0.021
Indeno(1,2,3-cd)pyrene	NA	78000	5.1	**13**		0.78	0.26	0.98		0.073	0.024	3.6		0.083	0.028	**12**		0.73	0.24	0.24		0.075	0.025	0.84		0.076	0.025
Pyrene	NA	NA	1800	32		1.1	0.16	3.6		0.1	0.015	9.4		1.2	0.17	28		1	0.15	0.4		0.11	0.015	1.5		0.11	0.016
Dibenzofuran	NA	NA	NA	3.3		1.8	0.16	0.75		0.17	0.015	0.37		0.2	0.017	2.6		1.7	0.15	ND		0.18	0.016	0.044	J	0.18	0.016
2-Methylnaphthalene	3.1	NA	240	1.2	J	2.2	0.2	0.45		0.21	0.018	0.16	J	0.24	0.021	1.5	J	2.1	0.18	ND		0.21	0.019	0.047	J	0.22	0.019
2,4-Dichlorophenol	0.19	NA	190	**ND**		**0.89**	**0.3**	ND		0.083	0.028	ND		0.095	0.032	**ND**		**0.83**	**0.28**	ND		0.085	0.028	ND		0.087	0.029
2,4-Dimethylphenol	2.3	NA	1300	**ND**		**1.8**	**0.59**	ND		0.16	0.055	ND		0.19	0.063	**ND**		**1.6**	**0.55**	ND		0.17	0.056	ND		0.17	0.058
2,4-Dinitrophenol	0.33	NA	130	**ND**		**2.7**	**0.87**	ND		0.25	0.081	ND		0.28	0.092	**ND**		**2.5**	**0.81**	ND		0.26	0.083	ND		0.26	0.085
Pentachlorophenol	0.33	NA	1	**ND**		**1.2**	**0.41**	ND		0.11	0.038	ND		0.13	0.044	**ND**		**1.1**	**0.38**	ND		0.12	0.039	0.081	J	0.12	0.04
Phenol	21	39000	19000	0.23	J	1.8	0.22	0.064	J	0.17	0.02	0.067	J	0.2	0.023	ND		1.7	0.2	ND		0.18	0.021	ND		0.18	0.022
2-Methylphenol	0.77	NA	320	**ND**		**1.8**	**0.29**	0.037	J	0.17	0.027	ND		0.2	0.031	**ND**		**1.7**	**0.27**	ND		0.18	0.028	ND		0.18	0.028
3-Methylphenol/4-Methylphenol	0.75	NA	630	**ND**		**2.7**	**0.27**	0.11	J	0.25	0.025	0.045	J	0.28	0.028	**ND**		**2.5**	**0.25**	ND		0.26	0.026	ND		0.26	0.026
Carbazole	NA	NA	NA	3.2		1.8	0.12	0.84		0.17	0.011	0.4		0.2	0.013	3.1		1.7	0.11	0.021	J	0.18	0.011	0.075	J	0.18	0.012
Benzaldehyde	NA	NA	170	ND		2.4	0.29	ND		0.23	0.027	ND		0.26	0.031	ND		2.3	0.27	ND		0.23	0.028	0.031	J	0.24	0.028
Biphenyl	NA	NA	87	0.36	J	4.2	0.24	0.089	J	0.4	0.022	0.057	J	0.45	0.026	0.49	J	3.9	0.22	ND		0.4	0.023	ND		0.41	0.024
Atrazine	0.33	NA	220	**ND**		**1.5**	**0.65**	ND		0.14	0.061	ND		0.16	0.069	**ND**		**1.4**	**0.6**	ND		0.14	0.062	ND		0.14	0.064
1,4-Dioxane	0.067	45	7	**ND**		**0.28**	**0.085**	ND		0.026	0.0079	ND		0.03	0.009	**ND**		**0.26**	**0.079**	ND		0.027	0.0081	ND		0.027	0.0083
Total SVOCs	NA	NA	NA	261.05	-	-	-	32.52	-	-	-	63.979	-	-	-	226.92	-	-	-	3.667	-	-	-	11.903	-	-	-
SVOC TICs																											
Total TIC Compounds	NA	NA	NA	58.9	J	0	0	11.3	J	0	0	17.4	J	0	0	57.6	J	0	0	2.02	J	0	0	6.68	J	0	0
Pesticides																											
Beta-BHC	0.0046	NA	0.3	**ND**		**0.0181**	**0.00687**	ND		0.00169	0.00064	**ND**		**0.00927**	**0.00351**	**ND**		**0.0162**	**0.00613**	**ND**		**0.00824**	**0.00312**	**ND**		**0.0169**	**0.00642**
Dieldrin	0.024	NA	0.034	**ND**		**0.0113**	**0.00566**	0.00071	J	0.00105	0.00052	0.0189		0.00579	0.0029	**ND**		**0.0101**	**0.00505**	**ND**		**0.00515**	**0.00258**	**ND**		**0.0106**	**0.00529**
4,4'-DDE	0.47	NA	2	0.0348	IP	0.0181	0.00419	0.0131		0.00169	0.00039	0.00947		0.00927	0.00214	0.0247	IP	0.0162	0.00374	0.0336		0.00824	0.0019	0.0469		0.0169	0.00392
4,4'-DDD	0.47	NA	2.3	ND		0.0181	0.00646	0.00125	J	0.00169	0.0006	ND		0.00927	0.0033	ND		0.0162	0.00577	0.00478	J	0.00824	0.00294	0.00781	JIP	0.0169	0.00604
4,4'-DDT	0.67	NA	1.9	0.0807		0.034	0.0146	0.00999		0.00316	0.00136	0.0125	JIP	0.0174	0.00745	0.0908		0.0303	0.013	0.0247		0.0154	0.00663	0.0325	IP	0.0318	0.0136
cis-Chlordane	1.4	NA	0.27	ND		0.0226	0.00631	0.00128	JIP	0.00211	0.00058	0.00836	JIP	0.0116	0.00323	0.0117	J	0.0202	0.00563	ND		0.0103	0.00287	0.00955	JIP	0.0212	0.0059
trans-Chlordane	1.4	NA	0.27	ND		0.0226	0.00598	0.00142	JIP	0.00211	0.00055	0.0102	J	0.0116	0.00306	0.0124	J	0.0202	0.00533	ND		0.0103	0.00272	0.0128	J	0.0212	0.00559
Polychlorinated Biphenyls (PCBs)																											
Aroclor 1260	1.6	NA	0.25	**0.566**		0.19	0.0351	ND		0.0352	0.0065	0.0577		0.0392	0.00725	0.0922		0.0348	0.00644	0.00719	J	0.0351	0.0065	**0.205**		0.0345	0.00637
Aroclor 1268	1.6	NA	0.25	0.115	J	0.19	0.0197	ND		0.0352	0.00365	0.0202	J	0.0392	0.00406	0.0436		0.0348	0.00361	ND		0.0351	0.00364	ND		0.0345	0.00357
PCBs, Total	1.6	NA	0.25	**0.681**	J	0.19	0.0169	ND		0.0352	0.00312	0.0779	J	0.0392	0.00348	0.136		0.0348	0.00309	0.00719	J	0.0351	0.00312	**0.205**		0.0345	0.00306
Total Metals																											
Aluminum, Total	NA	NA	78000	2770		8.78	2.37	4000		8.19	2.21	3870		9.29	2.51	2740		8	2.16	5200		8.22	2.22	4160		8.51	2.3
Antimony, Total	5.4	NA	31	4.47		4.39	0.334	ND		4.1	0.311	3.01	J	4.65	0.353	**8.86**		4	0.304	1.49	J	4.11	0.312	1.21	J	4.26	0.324
Arsenic, Total	19	1100	19	12.5		0.878	0.183	4.34		0.819	0.17	9.92		0.929	0.193	7.06		0.8	0.166	8.47		0.822	0.171	8.04		0.851	0.177
Barium, Total	2100	870000	16000	197		0.878	0.153	34.7		0.819	0.142	291		0.929	0.162	468		0.8	0.139	134		0.822	0.143	215		0.851	0.148
Beryllium, Total	0.7	2000	160	0.246	J	0.439	0.029	0.27	J	0.41	0.027	0.316	J	0.465	0.031	0.24	J	0.4	0.026	0.321	J	0.411	0.027	0.451		0.426	0.028
Cadmium, Total	1.9	2600	71	**2.68**		0.878	0.086	0.483	J	0.819	0.08	**1.99**		0.929	0.091	**2.78**		0.8	0.078	1.01		0.822	0.081	1.13		0.851	0.083
Calcium, Total	NA	NA	NA	1960		8.78	3.07	8050		8.19	2.87	8210		9.29	3.25	3720		8	2.8	3620		8.22	2.88	4630		8.51	2.98
Chromium, Total	NA	NA	NA	18.2		0.878	0.084	10.9		0.819	0.079	23.9		0.929	0.089	21.3		0.8	0.077	20.5		0.822	0.079	14.7		0.851	0.082
Cobalt, Total	90	520	23	3.46		1.76	0.146	3.04		1.64	0.136	4.23		1.86	0.154	3.22		1.6	0.133	5.23		1.64	0.136	5.51		1.7	0.141
Copper, Total	910	NA	3100	154		0.878	0.227	11.5		0.819	0.211	94.3		0.929	0.24	350		0.8	0.206	121		0.822	0.212	65.7		0.851	0.22
Iron, Total	NA	NA	NA	21700		4.39	0.793	8890		4.1	0.74	16100		4.65	0.839	16800		4	0.722	13400		4.11	0.743	12500		4.26	0.769
Lead, Total	90	NA	400	**386**		4.39	0.235	69.9		4.1	0.22	**269**		4.65	0.249	**613**		4	0.214	**155**		4.11	0.22	**184**		4.26	0.228
Magnesium, Total	NA	NA	NA	745		8.78	1.35	1330		8.19	1.26	1070		9.29	1.43	616		8	1.23	2160		8.22	1.27	2230		8.51	1.31
Manganese, Total	NA	87000	1900	126		0.878	0.14	81.7		0.819	0.13	224		0.929	0.148	250		0.8	0.127	142		0.822	0.131	99.2		0.851	0.135
Mercury, Total	0.1	520000	23	**0.829**		0.083	0.054	**0.165**		0.07	0.046	**0.488**		0.075	0.049	**0.94**		0.076	0.049	**0.274**		0.07	0.046	**0.228**		0.073	0.048
Nickel, Total	48	20000	1600	17.7		2.2	0.212	5.11		2.05	0.198	14.1		2.32	0.225	18.3		2	0.194	14.2		2.06	0.199	7.86		2.13	0.206
Potassium, Total	NA	NA	NA	401		220	12.6	530		205	11.8	587		232	13.4	255		200	11.5	1060		206	11.8	604		213	12.3
Selenium, Total	11	NA	390	ND		1.76	0.227	ND		1.64	0.211	ND		1.86	0.24	3.6		1.6	0.206	0.329	J	1.64	0.212	0.298	J	1.7	0.22
Silver, Total	0.5	NA	390	**0.536**	J	0.878	0.248	**ND**		**0.819**	**0.232**	**0.613**	J	0.929	0.263	**2.35**		0.8	0.226	**0.699**	J	0.822	0.233	0.383	J	0.851	0.241
Sodium, Total	NA	NA	NA	29.6	J	176	2.77	26.2	J	164	2.58	39.7	J	186	2.93	45.7	J	160	2.52	64.5	J	164	2.59	92.4	J	170	2.68
Vanadium, Total	NA	170000	390	18.8		0.878	0.178	14.4		0.819	0.166	21.6		0.929	0.189	13.2		0.8	0.162	26.9		0.822	0.167	18.5		0.851	0.173
Zinc, Total	930	NA	23000	443		4.39	0.257	52.8		4.1	0.24	510		4.65	0.272	649		4	0.234	229		4.11	0.241	212		4.26	0.249
General Chemistry																											
Solids, Total	NA	NA	NA	87.1		0.1	NA	93.1		0.1	NA	83.6		0.1	NA	93.9		0.1	NA	92.8		0.1	NA	90.9		0.1	NA
Cyanide, Total	20	NA	47	1.8		1	0.22	ND		1	0.22	0.39	J	1.2	0.25	1.6		1	0.22	ND		1.1	0.23	ND		1.1	0.22

All units are presented in milligrams per kilogram (mg/kg) unless stated otherwise
SS - Sample Specific Standard generated utilizing the 2021 NJDEP EPH Category II, Ingestion/Dermal Calculator
-- - Sample not analyzed for this parameter
J - Designates the concentration is below the Quantitation Limit (RL) but above the Method Detection Limit (MDL); therefore, the concentration is considered estimated.
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RISRS - Residential Inhalation Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
RIDSRS - Residential Ingestion/Dermal Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
MGWSRS - Migration to Groundwater Soil Remediation Standards, per N.J.A.C. 7:26D last amended May 17, 2021
Bold values and highlighted cells indicate the concentration exceeds the more stringent of the RISRS or RIDSRS
Bold and blue colored values indicate the concentration exceeds the MGWSRS
Red Bold values indicate the Method Detection Limit (MDL) is elevated and may exceed the applicable standards.

APPENDIX A

Soil Boring Logs

SOIL BORING LOG

PROJECT NAME: Robert B. Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-1
SHEET: 1 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: NW end of park
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown mf sand, little silt, trace f gravel. - Fill (tile, brick, and asphalt).	CIP-1 (0-0.5')	0.3
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-2
SHEET: 2 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: NW, adjacent to courts
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0.0-1.0': Same as CIP-1. - Fill (tile, brick, and asphalt).	CIP-2 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-3
SHEET: 3 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: NW along, Thurman St
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Grey/brown mf sand, little silt, trace f gravel. - Fill (tile, brick, and asphalt).	CIP-3 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-4
SHEET: 4 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: N central along Thurman
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-1.0': Same as CIP-3. - Fill (asphalt, glass, and coal).	CIP-4 (0.5-1.0')	0.1
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-5
SHEET: 5 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: NE corner of park
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Same as CIP-1. - Fill (small amount of brick).	CIP-5 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-6
SHEET: 6 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: E center of park
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown cmf sand, little silt, little f gravel. 0.5-1.0': Brown/orange cmf sand, little silt, little f gravel. - Fill (glass, coal, and wood).	CIP-6 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-7
SHEET: 7 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: Center of football field
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0.0-0.75': Brown cmf sand, little silt, trace f gravel. 0.75-1.0': Tan/brown mf sand, little sitl, little f gravel. - Fill (small amount of brick at 1').	CIP-7 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

The information shown hereon indicates the subsurface conditions encountered at the specific boring location on the date(s) of drilling. Subsurface conditions are likely to vary across the project site. Interpretation of the subsurface data shall be at the discretion of the user.

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-8
SHEET: 8 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: NE corner of f-ball field
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-1.0': Tan/brown cmf sand, little silt, trace f gravel. - Fill (brick and coal).	CIP-8 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

The information shown hereon indicates the subsurface conditions encountered at the specific boring location on the date(s) of drilling. Subsurface conditions are likely to vary across the project site. Interpretation of the subsurface data shall be at the discretion of the user.

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-9
SHEET: 9 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: SE corner of courts
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-1.0': Grey/brown cmf sand, little silt, little f gravel. - Fill (brick, tile, glass, weathered concrete, coal).	CIP-9 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-10
SHEET: 10 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: W of snack shack
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown cmf sand, come f gravel. - Fill (plastic, glass, tile, fabric).	CIP-10 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-11
SHEET: 11 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: SW corner of f-ball field
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.75': Brown cmf sand, little silt, trace f gravel. 0.75-1.0': Tan/brown mf sand, little silt, little f gravel. - No Fill.	CIP-11 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-12
SHEET: 12 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: E side, center
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown cmf sand, little silt, trace f gravel. - Fill (small amount of brick).	CIP-12 (0-0.5')	0.1
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-13
SHEET: 13 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: W of snack shack
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-1.0': Grey/brown cmf sand, little silt, trace f gravel. - Fill (small amount of glass, brick, and coal).	CIP-13 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-14
SHEET: 14 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: E side of snack shack
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown mf sand, trace silt. - No Fill.	CIP-14 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-15
SHEET: 15 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: S of f-ball bleachers
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown cmf sand, little silt, little f gravel. - Black mf sand encountered at 0.5'. - Fill (metal wire, brick, glass, and tile).	CIP-15 (0-0.5')	1.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-16
SHEET: 16 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: SW area of park
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.75': Brown mf sand, little silt, little f gravel. 0.75-1.0': Black/brown/tan cmf sand, little silt, little f gravel. - Fill (tile, coal, metal).	CIP-16 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-17
SHEET: 17 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: S of snack shack
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.75': Light brown cmf sand, little f gravel. 0.75-1.0': Brown cmf sand, little silt, little f gravel. - Fill (metal wire, brick, coal, glass).	CIP-17 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-18
SHEET: 18 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: S end of f-ball field
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Black/brown cmf sand, little silt, little f gravel. 0.5-1.0': Tan/brown cmf sand, little silt, little f gravel. - Fill (tile, coal).	CIP-18 (0.5-1.0')	0.2
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-19
SHEET: 19 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: E side, 8th st entrance
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown mf sand, little silt, little f gravel. - No Fill.	CIP-19 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-20
SHEET: 20 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: Top of hill, center
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown mf sand, little silt, little f gravel. - Fill (small amount of coal and glass).	CIP-20 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-21
SHEET: 21 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: SE edge of f-ball field
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brwon mf sand, little silt, little f gravel. 0.5-1.0': Tan/brown cmf sand, little silt, trace f gravel. - Fill (small amount of glass and brick).	CIP-21 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-22
SHEET: 22 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: SE, 8th st entrance
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Brown mf sand, little silt, little f gravel. 0.5-1.0': Tan mf sand, little silt, little f gravel. - Fill (metal wire, coal, brick).	CIP-22 (0.5-1.0')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-23
SHEET: 23 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: SW corner of park
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Dark brown mf sand, little silt, little f gravel. - Fill (weathered concrete, brick, insulation, glass).	CIP-23 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-24
SHEET: 24 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: south of CIP-9
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Grey/brown mf sand, little silt, little f gravel. - Fill (glass, brick).	CIP-24 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-25
SHEET: 25 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: W, top of hill
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' --- --- 5'--- ---10'--- ---15'--- ---20'--- ---25'--- ---30'--- ---35'--- ---40'---	N/A	0-0.25': Topsoil 0.25-0.5': Tan mf sand, little silt, little f gravel. - Fill (small amount of brick and plastic).	CIP-25 (0-0.5')	0.0

SOIL INSPECTOR: Nicholas Lane

The information shown hereon indicates the subsurface conditions encountered at the specific boring location on the date(s) of drilling. Subsurface conditions are likely to vary across the project site. Interpretation of the subsurface data shall be at the discretion of the user.

SOIL BORING LOG

PROJECT NAME: Robert Johnson Park
FPA PROJECT No.: 17087.006

BORING NO.: CIP-26
SHEET: 26 OF 26

DATE: 07/12/2022

DEPTH TO WATER (ft.): NA
LOCATION: S center of f-ball field
AOC: __1_____

DRILLING TECHNIQUE: Stainless Steel Hand Auger

DEPTH FEET	Recovery (ft.)	DESCRIPTION OF SOIL	SAMPLE DEPTH	PID
--- 0' ---	N/A	0-0.5': Browm cmf sand, little silt, trace f gravel. - No Fill	CIP-26 (0-0.5')	0.0
--- 5'---				
---10'---				
---15'---				
---20'---				
---25'---				
---30'---				
---35'---				
---40'---				

SOIL INSPECTOR: Nicholas Lane

The information shown hereon indicates the subsurface conditions encountered at the specific boring location on the date(s) of drilling. Subsurface conditions are likely to vary across the project site. Interpretation of the subsurface data shall be at the discretion of the user.

APPENDIX B

NJDEP Laboratory Reduced Data Package