

# Appendix H-2

## Licensed Quarry Material - Information and Analytical Data Report

- Licensed quarry material collected by Tilcon from the Mount Hope quarry (reports included in this Appendix) exceeded the DIGWSSL for manganese. Manganese is a naturally occurring and the applicable Groundwater Quality Standards are based on secondary considerations (primarily aesthetic considerations such as taste, odor, and appearance) and not health considerations; as such, the exceedances do not need to be addressed for the impact to groundwater pathway.
- Licensed quarry material collected by Tilcon from the Pompton Lakes quarry (reports included in this Appendix) exceeded the DIGWSSLs for manganese. Manganese is naturally occurring and the applicable Groundwater Quality Standards are based on secondary considerations (primarily aesthetic considerations such as taste, odor, and appearance) and not health considerations; as such, the exceedance does not need to be addressed for the impact to groundwater pathway.

# COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method B Modified

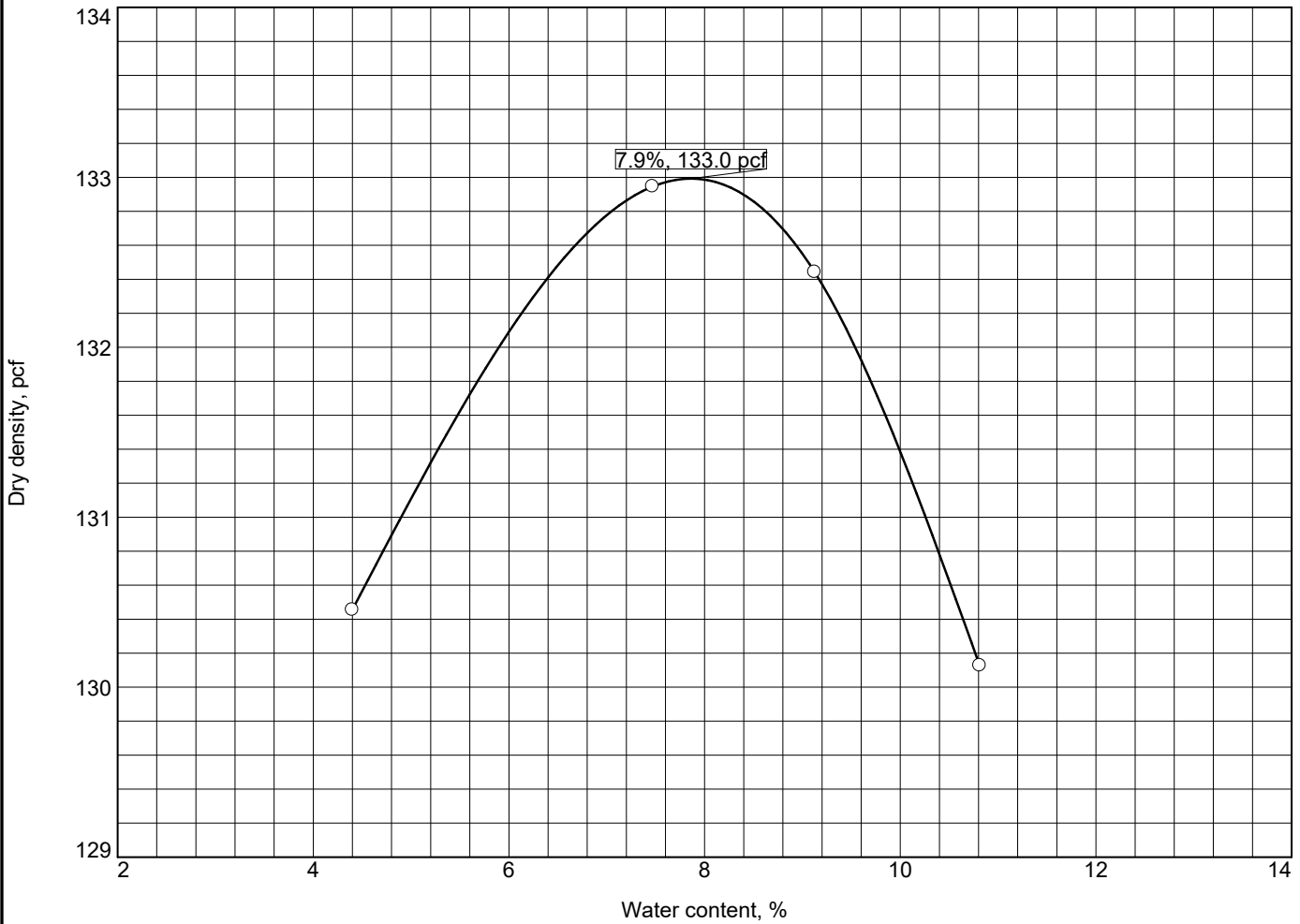
Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SP-SM	A-1-b		2.75	NV	NP	0.0	11.8

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 131.6 pcf Optimum moisture = 8.5 %	Light Gray poorly graded sand with silt
<b>Project No.</b> 889 <b>Client:</b> CHEMTECH <b>Project:</b> K4541 - PPG Site 107 ○ <b>Sample Number:</b> 107-SCREENINGS-PL001 <b>RSA Geolab</b> <b>Union, New Jersey</b>	<b>Remarks:</b> SG Assumed 8-30-19

Figure

Tested By: MF \_\_\_\_\_ Checked By: KP \_\_\_\_\_

# COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method B Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SP-SM	A-1-b		2.75	NV	NP	0.0	11.6

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 133.0 pcf Optimum moisture = 7.9 %	Light Gray poorly graded sand with silt
<b>Project No.</b> 889 <b>Client:</b> CHEMTECH <b>Project:</b> K4541 - PPG Site 107 <input type="checkbox"/> <b>Sample Number:</b> 107-SCREENINGS-MH001 <div style="text-align: center;"><b>RSA Geolab</b></div> <div style="text-align: center;"><b>Union, New Jersey</b></div>	<b>Remarks:</b> SG Assumed 8-30-19
<b>Figure</b>	

Tested By: BP      Checked By: KP



## TILCON NEW YORK INC.

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PHONE: 973-366-7741 9 ENTIN ROAD, PARSIPPANY, New Jersey 07054

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### **2021 Clean Fill Material Certification- NJ Locations Only**

Tilcon NY Inc. New Jersey Division confirms to the best of our knowledge that the aggregates produced at the locations below are virgin stone products, contain no hazards or contamination prior to shipment of materials and conform to section 901 of the *2007 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction*, The material is identified on the job with Tilcon NJ delivery tickets. The quarries are listed in the Quality List (QPL) of the NJDOT website

<http://www.state.nj.us/transportation/eng/materials/qualified/QLDB.shtm>

**Pompton Lakes Quarry- Granite Gneiss**, 84 Borough of Pompton Lakes, Passaic County Blocks No(s) 5105, 5105 - Lot(s) 84, 14.2. Pompton Lakes quarry contains NJDOT approved crushed stone and certified fill products.

**Mt. Hope Quarry- Granite Gneiss**, 625 Mt Hope Road, Wharton Borough, Morris County NJ, Block No 20001 Lot(s) No(s) 5.01, 5.02, 7; Block No 70001 Lot No 2; Block No 20101 Lot No 6. Mt Hope quarry contains NJDOT approved crushed stone, washed products and certified fill products.

Tilcon NY Inc. has had Pompton Lakes and Mt Hope quarries analyzed under the EPA Target Compound List as required by the LSRP program- *NJDEP Residential Direct Contact Soil Remediation Standards/Clean Fill Criteria*. A copy of the report is available upon request. To the best of our knowledge, the materials produced at the above quarries comply with Section 7 of the Fill Material Guidance for SRP Sites.

**Riverdale Quarry- Granite Gneiss**, 125 Hamburg Turnpike, Riverdale, Morris County NJ, Block No9s0 25, 26, 27, 29 Lot No 3. Riverdale Quarry NJDOT approved crushed stone, washed products and certified fill materials.

**Oxford Quarry- Granite Gneiss and Limestone**, Quarry and Mt Pisgah Avenue, White Township, Warren County Block 32- Lots 15,16 Block 33- Lots 22,23 Block 34 Lots 19,20 Block 25- Lots 3,5,9,90.1 NJDOT approved crushed stone, washed products and certified materials.

Tilcon New York, INC Quality Control 973-659-3790

An Equal Opportunity Employer

# S & S ENVIRONMENTAL SCIENCES, INC.

*Environmental Engineering, Testing and Consultation*

98 Sand Park Road, Cedar Grove, NJ 07009  
Tel (973) 857-7188 Fax (973) 239-8380

Kamil Sor, Ph.D.  
Orhun Sor, P.E.  
Atilla Sencar, P.E.

This report is the confidential property of the Client, and information contained may not be published or reproduced without our written permission.

<b>Client:</b>	Tilcon New York, Inc.				
<b>Project:</b>	Mount Hope, NJ (NJDEP-SRS)				
<b>Subject:</b>	Laboratory Analysis of Aggregate Sample (Quarry Fines)-NJ				
<b>Job No.:</b>	07E34	<b>Report Number:</b>	20-E-64	<b>Date:</b>	5/21/2020

We present herewith the laboratory test results of an aggregate sample delivered to our laboratory (identified as Quarry Fines) on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDSCRS) indicated that the aggregate sample **meet** the **NJDEP-RDSCRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours,  
S & S ENVIRONMENTAL SCIENCES, INC.



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Kamil Sor, Ph.D.  
President

KS/ag

Attachments:

- (1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client

Steve O'Reilly

email: [soreilly@tilconny.com](mailto:soreilly@tilconny.com)

# S&S ENVIRONMENTAL SCIENCES, INC.

*Environmental Engineering, Testing and Consultation*

88 Sand Park Rad, Cedar Grove, NJ 07009  
Tel (973) 857-7188 Fax (973) 239-8380

NJDEP Lab Certification No. 07073

## SAMPLE CHAIN OF CUSTODY

CLIENT:	TILCON	DATE:	4-28-20
ADDRESS:		SSES JOB NO.	
CONTACT:		TEL #:	
PROJECT:	Mt Hope, NJ	PROJECT LAB ID #:	20049

SAMPLE NUMBER	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	NO. OF BOTTLES	ANALYSES REQUESTED
20049	4-28-20	900	Gravel		NY-NJ Cleanfill

Comments:

PRESERVATIVE	
Cooled at 4°C?	^
HCl	
HNO <sub>3</sub>	
H <sub>2</sub> SO <sub>4</sub>	
NaOH	
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	
Other	

pH Meter No.:	Reading	T°C	Time	Analyst
pH				
pH Dup.				

Sampled By: S.O.

RELINQUISHED BY:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RECEIVED BY:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE AND TIME:

4.28.20 11:15  
\_\_\_\_\_  
\_\_\_\_\_

Customer Information		Reporting Information		Deliverables			EDDs		Concentrations Expected		
Company: SCS	REPORT TO:	NJ, CT, PA	NY	NJ SRP		Low	Med	High			
Address:	Address:	Results Only (Level I)	ASP Category A	NYSDEC EQUIS		Known Hazard:					
Telephone #: 973-237-6001	Attn: Sean	Reduced (Level III)	ASP Category B	lab approved custom EDD		<input type="checkbox"/> YES <input type="checkbox"/> NO					
Fax #:	FAX #:	Regulatory Full (Level IV)		NO EDD REQ'D		Describe:					
Project Manager: P.L.C.	INVOICE TO:	Turn-Around Time (TAT)		New Jersey		Regulatory Requirement					
EMAIL Address:	Address:	Standard (10 business days) Verbal		GWQS		AWQS (TOGS Table 1)					
Project Name: Mount Hope	Attn: NJ	Rushdata needed (only if pre-approved)*		GW		GWEL (TOGS Table 5)					
Project Location (State): NJ		Hard Copy: Std 3 week		SRS		Part 375-6.8(a) - Unrestricted					
Bottle Order #: "Report to" invoice To: same as above		Petroleum Hydrocarbons - Selection is REQUIRED		Ecological		Part 375-6.8(b) - Restricted					
Sampled by: S.O.	Quote #: 20-049	TAT for PHC, if other than 2 weeks:		DW		CP-51 Table 2 of Section required					
COMPLETED BY IAL:		Other - call for price		SPLP		Other States / Criteria					
Field Sampling	Equipment Rental	ANALYTICAL PARAMETERS (please note if contingent)				Pennsylvania Act 2					
Client ID: 20-049	Depth (ft only):	Sample Matrix		+30 TALTCR		CT RCSA 22a-133k1-k3					
		Oil - Oil	S - Soil	+ 10 PH		TSCA PCBs					
Other - call for price	Date: 4-28-20	Time: 9:00	Matrix: SOL	+ 10 IHL		OTHER REGULATORY REQUIREMENTS - specify in comments					
Field Sampling				+ 30 IHL		Sample Specific Notes:					
						FOR LAB USE ONLY					
						SDG #: 2898					
						Cooler Temp: 6 °C					
Samples previously analyzed by IAL? YES / NO		Preservative Code:		Container Code:		Preservative (use code)		Container Type (use code)		Date / Time	
Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM.		1 = None 2 = HCl 3 = HNO3 4 = MeOH 5 = NaOH 6 = H2SO4 7 = Other		A = Amber Glass B = Plastic C = Vial D = Glass E = EnCore T = Ferracote		NY-NJ Clean Air		FD Inc SRS Parameters		4/28/20 14:15	
BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).		Carrier (check one): <input type="checkbox"/> IAL Courier <input type="checkbox"/> Client Courier <input type="checkbox"/> FedEx/UPS***		Reimbursement by (Signature and Company)		Received by (Signature and Company)		Date / Time		PAGE: 1 of 1	
		Tracking #:									
LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK											

SAMPLE RECEIPT VERIFICATION

CASE NO: E 20 02898

CLIENT: S+S

COOLER TEMPERATURE: 2° - 6°C: [checked] ( See Chain of Custody)

Comments

COC: COMPLETE / INCOMPLETE KEY

[checked] = YES/NA [X] = NO

VOA received: [checked] 250 Encore [ ] IGW - Methanol [ ] Terra Core [ ] No Preservative

- [checked] Bottles Intact [checked] no-Missing Bottles [checked] no-Extra Bottles [checked] Sufficient Sample Volume [checked] no-headspace/bubbles in VO's [checked] Labels intact/correct [checked] pH Check (exclude VO's) [checked] Correct bottles/preservative [checked] Sufficient Holding/Prep Time [ ] Multiphasic Sample [ ] Sample to be Subcontracted [checked] Chain of Custody is Clear

1 All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP DATE 4/28/20

CORRECTIVE ACTION REQUIRED: YES [ ] NO [checked]

If COC is NOT clear, STOP until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [ ] Date/ Time: NO [ ]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 4/29/20



208555

**CLIENT & PROJECT**

Name: Integrated Analytical Laboratories LLC  
 Contact: Thomas Malanga  
 Fax #:   
 E-Mail to: tmalanga@ialonline.com  
 Report to: Thomas Malanga  
 Address:   
 Telephone #: 973-361-4252  
 Fax #: 973-989-5288  
 Project Name: E20-02898  
 Invoice to: Thomas Malanga  
 Address:   
 Project Location (State): NJ  
 Project Manager:   
 Reference ID#: PO#

**REPORTING & BILLING**

Turnaround Time  
 Verbal/Fax  
 24 hr\* 48 hr\* 72 hr\* 1 wk\* 2 wk\* Other: 6 Business Days  
 Hard Copy  
 72 hr\* 1 wk\* 2 wk\* 3 wk\* Other:   
 \*Prior to sample arrival, Lab notification is required.  
 Report Format  
 Reduced / Level III  
 Special Requirements

**ANALYTICAL PARAMETERS / PRESERVATIVES**  
 Preservative  
 1 - HCl; 2 - NaOH; 3 - HNO<sub>3</sub>  
 4 - H<sub>2</sub>SO<sub>4</sub>; 5 - MeOH; 6 - Other

Sample ID	Sample Depth (in Feet)	Sampling		Matrix	# of Containers	ANALYTICAL PARAMETERS / PRESERVATIVES						Known Hazard: yes no		
		Date	Time			1	2	3	4	5	6		Describe:	
E20-02898-001		4/28/20	09:00	Soil	1	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
						4.5.6	4.5.6	4.5.6	4.5.6	4.5.6	4.5.6	4.5.6	4.5.6	4.5.6
Total Cyanide (9012B)														
Run														
COOLER TEMP. °C														
Concentrations Expected														
LOW MED HIGH														



Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

**EMAIL CONFIRMATION REQUIRED**

**CUSTODY LOG**

Signature/Company	Date	Time	Signature/Company
<i>Chang</i>	5/16/20	11:36	Received by: <i>Chang</i> on 5/16/20
			Received by:
			Received by:

4.9.0 IR-11 PROC

056 (001/601)

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: MOUNT HOPE**  
**Lab Case No.: E20-02898**

PARAMETER(Units)	Conc	Q	MDL
<b>Lab ID: 02898-001</b> <b>Client ID: 20-049</b> <b>Matrix: Soil</b> <b>Sampled Date: 4/28/20</b>			
<b>Volatiles (Units)</b>	<b>(mg/Kg)</b>		
Dichlorodifluoromethane	ND		0.000419
Chloromethane	ND		0.00046
Vinyl chloride	ND		0.000458
Bromomethane	ND		0.000646
Chloroethane	ND		0.000514
Trichlorofluoromethane	ND		0.000434
Acrolein	ND		0.00524
1,1-Dichloroethene	ND		0.000441
Acetone	ND		0.00276
Carbon disulfide	ND		0.000273
Methylene chloride	ND		0.0021
Acrylonitrile	ND		0.00464
tert-Butyl alcohol (TBA)	ND		0.0011
trans-1,2-Dichloroethene	ND		0.000432
Methyl tert-butyl ether (MTBE)	ND		0.000321
1,1-Dichloroethane	ND		0.000394
cis-1,2-Dichloroethene	ND		0.000374
2-Butanone (MEK)	ND		0.00103
Bromochloromethane	ND		0.000314
Chloroform	ND		0.000608
1,1,1-Trichloroethane	ND		0.000306
Carbon tetrachloride	ND		0.000298
1,2-Dichloroethane (EDC)	ND		0.000409
Benzene	ND		0.000234
Trichloroethene	ND		0.000315
1,2-Dichloropropane	ND		0.000253
1,4-Dioxane	ND		0.039
Bromodichloromethane	ND		0.000216
cis-1,3-Dichloropropene	ND		0.000232
4-Methyl-2-pentanone (MIBK)	ND		0.000793
Toluene	ND		0.000247
trans-1,3-Dichloropropene	ND		0.00028
1,1,2-Trichloroethane	ND		0.000332
Tetrachloroethene	ND		0.000404
2-Hexanone	ND		0.00166
Dibromochloromethane	ND		0.000297
1,2-Dibromoethane (EDB)	ND		0.000214
Chlorobenzene	ND		0.000246
Ethylbenzene	ND		0.000298
Total Xylenes	ND		0.00116
Styrene	ND		0.00036
Bromoform	ND		0.000375
Isopropylbenzene	ND		0.000367
1,1,2,2-Tetrachloroethane	ND		0.000473
n-Propylbenzene	ND		0.0003

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: MOUNT HOPE**  
**Lab Case No.: E20-02898**

Lab ID:	02898-001		
Client ID:	20-049		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
<b>Volatiles (Units)</b>		<i>(mg/Kg)</i>	
1,3,5-Trimethylbenzene	ND		0.000488
tert-Butylbenzene	ND		0.000345
1,2,4-Trimethylbenzene	ND		0.000558
sec-Butylbenzene	ND		0.000359
1,3-Dichlorobenzene	ND		0.000319
4-Isopropyltoluene	ND		0.000415
1,4-Dichlorobenzene	ND		0.000319
n-Butylbenzene	ND		0.000446
1,2-Dichlorobenzene	ND		0.0003
1,2-Dibromo-3-chloropropane	ND		0.000596
1,2,4-Trichlorobenzene	ND		0.000423
1,2,3-Trichlorobenzene	ND		0.000427
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.000477
Methyl acetate	ND		0.000332
Cyclohexane	ND		0.000491
Methylcyclohexane	ND		0.000314
1,3-Dichloropropene (cis- and trans-)	ND		0.00028
<b>TOTAL TIC's:</b>		ND	
<b>Semivolatiles (Units)</b>		<i>(mg/Kg)</i>	
N-Nitrosodimethylamine	ND		0.028
Benzaldehyde	ND		0.027
Phenol	ND		0.032
Aniline	ND		0.021
Bis(2-chloroethyl) ether	ND		0.026
2-Chlorophenol	ND		0.026
Benzyl alcohol	ND		0.032
2-Methylphenol	ND		0.020
2,2'-Oxybis(1-Chloropropane)	ND		0.032
4-Methylphenol **	ND		0.023
N-Nitrosodi-n-propylamine	ND		0.023
Acetophenone	ND		0.028
Hexachloroethane	ND		0.027
Nitrobenzene	ND		0.022
Isophorone	ND		0.024
2-Nitrophenol	ND		0.030
2,4-Dimethylphenol	ND		0.020
Bis(2-chloroethoxy) methane	ND		0.027
Benzoic acid	ND		0.028
2,4-Dichlorophenol	ND		0.026
Naphthalene	ND		0.026
4-Chloroaniline	ND		0.023
Hexachlorobutadiene	ND		0.021
Caprolactam	ND		0.025

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: MOUNT HOPE**  
**Lab Case No.: E20-02898**

PARAMETER(Units)	Lab ID:	02898-001
	Client ID:	20-049
	Matrix:	Soil
	Sampled Date	4/28/20
	Conc	Q MDL
<b>Semivolatiles (Units)</b>		<b>(mg/Kg)</b>
4-Chloro-3-methylphenol	ND	0.023
2-Methylnaphthalene	ND	0.021
Hexachlorocyclopentadiene	ND	0.028
2,4,6-Trichlorophenol	ND	0.026
2,4,5-Trichlorophenol	ND	0.028
1,1'-Biphenyl	ND	0.028
2-Chloronaphthalene	ND	0.025
2-Nitroaniline	ND	0.025
Dimethyl phthalate	ND	0.024
2,6-Dinitrotoluene	ND	0.032
Acenaphthylene	ND	0.026
3-Nitroaniline	ND	0.025
Acenaphthene	ND	0.027
2,4-Dinitrophenol	ND	0.031
4-Nitrophenol	ND	0.030
2,4-Dinitrotoluene	ND	0.029
Dibenzofuran	ND	0.025
Diethyl phthalate	ND	0.020
Fluorene	ND	0.028
4-Chlorophenyl phenyl ether	ND	0.027
4-Nitroaniline	ND	0.021
1,2,4,5-Tetrachlorobenzene	ND	0.023
2,3,4,6-Tetrachlorophenol	ND	0.028
4,6-Dinitro-2-methylphenol	ND	0.032
N-Nitrosodiphenylamine	ND	0.031
1,2-Diphenylhydrazine	ND	0.032
4-Bromophenyl phenyl ether	ND	0.023
Hexachlorobenzene	ND	0.023
Atrazine	ND	0.025
Pentachlorophenol	ND	0.022
Phenanthrene	ND	0.031
Anthracene	ND	0.032
Carbazole	ND	0.029
Di-n-butyl phthalate	ND	0.028
Fluoranthene	ND	0.032
Benidine	ND	0.025
Pyrene	ND	0.030
Butyl benzyl phthalate	ND	0.031
3,3'-Dichlorobenzidine	ND	0.029
Benzo[a]anthracene	ND	0.020
Chrysene	ND	0.031
Bis(2-ethylhexyl) phthalate	ND	0.030
Di-n-octyl phthalate	ND	0.031
Benzo[b]fluoranthene	ND	0.032
Benzo[k]fluoranthene	ND	0.028

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: MOUNT HOPE**  
**Lab Case No.: E20-02898**

Lab ID:	02898-001	
Client ID:	20-049	
Matrix:	Soil	
Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q MDL
<b>Semivolatiles (Units)</b>		
	<i>(mg/Kg)</i>	
Benzo[a]pyrene	ND	0.029
Indeno[1,2,3-cd]pyrene	ND	0.032
Dibenz[a,h]anthracene	ND	0.030
Benzo[g,h,i]perylene	ND	0.032
Dinitrotoluene (2,4- and 2,6-)	ND	0.032
<b>TOTAL TIC's:</b>		
	ND	
<b>PCB's (Units)</b>		
	<i>(mg/Kg)</i>	
Aroclor-1016	ND	0.00131
Aroclor-1221	ND	0.00131
Aroclor-1232	ND	0.00131
Aroclor-1242	ND	0.00131
Aroclor-1248	ND	0.00131
Aroclor-1254	ND	0.00131
Aroclor-1260	ND	0.00131
Aroclor-1262	ND	0.00131
Aroclor-1268	ND	0.00131
PCBs	ND	0.00131
<b>Pesticides (Units)</b>		
	<i>(mg/Kg)</i>	
alpha-BHC	ND	0.000327
beta-BHC	ND	0.000327
gamma-BHC (Lindane)	ND	0.000327
delta-BHC	ND	0.000327
Heptachlor	ND	0.000327
Aldrin	ND	0.000327
Heptachlor epoxide	ND	0.000327
Endosulfan I	ND	0.000327
4,4'-DDE	ND	0.000327
Dieldrin	ND	0.000327
Endrin	ND	0.000327
Endosulfan II	ND	0.000327
4,4'-DDD	ND	0.000327
Endrin aldehyde	ND	0.000327
Endosulfan sulfate	ND	0.000327
4,4'-DDT	ND	0.000327
Endrin ketone	ND	0.000327
Methoxychlor	ND	0.000327
alpha-Chlordane	ND	0.000327
gamma-Chlordane	ND	0.000327
Toxaphene	ND	0.00392
Endosulfan (I and II)	ND	0.000327
Chlordane (alpha and gamma)	ND	0.000327

ND = Analyzed for but Not Detected at the MDL

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: MOUNT HOPE**  
**Lab Case No.: E20-02898**

		Lab ID:	02898-001	
		Client ID:	20-049	
		Matrix:	Soil	
		Sampled Date	4/28/20	
PARAMETER(Units)	Conc	Q	MDL	
<b>Herbicides (Units)</b>		<i>(mg/Kg)</i>		
Dalapon	ND		0.0066	
Dicamba	ND		0.0066	
2,4-D	ND		0.0066	
2,4,5-TP (Silvex)	ND		0.0066	
2,4,5-T	ND		0.0066	
2,4-DB	ND		0.0066	
Dinoseb	ND		0.0066	
<b>NJ-EPH-C40 (Units)</b>		<i>(mg/Kg)</i>		
C9-C40	ND		19.5	
<b>Alcohols (Units)</b>		<i>(mg/Kg)</i>		
Methanol	ND		1.91	
<b>Metals (Units)</b>		<i>(mg/Kg)</i>		
Aluminum	2040		2.08	
Antimony	0.360	J	0.208	
Arsenic	1.14		0.156	
Barium	8.52		0.260	
Beryllium	0.674		0.156	
Cadmium	ND		0.313	
Calcium	3740		15.6	
Chromium	3.72		0.260	
Cobalt	3.70		0.156	
Copper	9.66		0.365	
Iron	9670		15.6	
Lead	2.02		0.260	
Magnesium	2260		15.6	
Manganese	65.7		0.365	
Mercury	ND		0.010	
Nickel	4.31		0.365	
Potassium	1240		20.8	
Selenium	4.01		1.56	
Silver	ND		0.313	
Sodium	161		20.8	
Thallium	0.455	J	0.260	
Vanadium	7.69		0.260	
Zinc	10.6		1.04	

ND = Analyzed for but Not Detected at the MDL  
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: MOUNT HOPE**  
**Lab Case No.: E20-02898**

<b>Lab ID:</b>	<b>02898-001</b>		
<b>Client ID:</b>	<b>20-049</b>		
<b>Matrix:</b>	<b>Soil</b>		
<b>Sampled Date</b>	<b>4/28/20</b>		
<b>PARAMETER(Units)</b>	<b>Conc</b>	<b>Q</b>	<b>MDL</b>
<b>General Analytical (Units)</b>			
Hexavalent Chromium(mg/Kg)	ND		0.379
pH/Corrosivity(SU)	8.47		NA
Trivalent (III) Chromium(mg/Kg)	3.72		0.379
<b>Subcontracted Data (Units)</b>			
	<i>(mg/Kg)</i>		
	*		*

ND = Analyzed for but Not Detected at the MDL

\*Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.  
 Eurofins TestAmerica, Edison  
 SUMMARY OF ANALYTICAL RESULTS: 460-208555-1  
 Job Description: E20-02898

For:  
 Integrated Analytical Laboratories LLC  
 PO BOX 8026  
 Parsippany, New Jersey 07054

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	NJDEP	E20-02898-001
Lab Sample ID	Residential	Non-Residential	IGW Screening	460-208555-1
Sampling Date	Sept_2017	Sept_2017	Nov_2013	04/28/2020 09:00:00
Matrix				Soil
<b>SOIL BY 9012B</b>				
Cyanide, Total [mg/kg]	47	680	20	0.12
				U F1
				MDL

F1 : MS and/or MSD recovery exceeds control limits.  
 U : Indicates the analyte was analyzed for but not detected.

Lab Contact:  
 Jill Miller  
 Senior Project Manager  
 (484)685-0871



Sample #: Field ID: Lab ID: Date Sampled: Depth(ft):	NJDEP SOIL REMEDIATION STANDARDS				20-049		
	Residential SRS (mg/Kg)	Non-Res SRS (mg/Kg)	Default IGW Screening Level (mg/Kg)	Conc	Q	RL	MDL
	CAS	(mg/Kg)	(mg/Kg)	(mg/Kg)			
<b>Volatiles (mg/Kg)</b>							
Dichlorodifluoromethane	490	230000	39	ND	0.00108	0.000419	
Chloromethane	4	12	NS	ND	0.00108	0.00046	
Vinyl chloride	0.7	2	0.005	ND	0.00108	0.000458	
Bromomethane	25	59	0.04	ND	0.00108	0.000646	
Chloroethane	220	1100	NS	ND	0.00108	0.000514	
Trichlorofluoromethane	23000	340000	34	ND	0.00108	0.000434	
Acrolein	0.5	1	0.5	ND	0.022	0.00524	
1,1-Dichloroethene	11	150	0.008	ND	0.00108	0.000441	
Acetone	70000	NS	19	ND	0.011	0.00276	
Carbon disulfide	7800	110000	6	ND	0.00108	0.000273	
Methylene chloride	46	230	0.01	ND	0.00216	0.0021	
Acrylonitrile	0.9	3	0.5	ND	0.022	0.00464	
tert-Butyl alcohol (TBA)	1400	11000	0.3	ND	0.00432	0.0011	
trans-1,2-Dichloroethene	300	720	0.6	ND	0.00108	0.000432	
Methyl tert-butyl ether (MTBE)	110	320	0.2	ND	0.00108	0.000321	
1,1-Dichloroethane	8	24	0.2	ND	0.00108	0.000394	
cis-1,2-Dichloroethene	230	560	0.3	ND	0.00108	0.000374	
2-Butanone (MEK)	3100	44000	0.9	ND	0.00432	0.00103	
Bromochloromethane	NS	NS	NS	ND	0.00108	0.000314	
Chloroform	0.6	2	0.4	ND	0.00108	0.000608	
1,1,1-Trichloroethane	160000	NS	0.3	ND	0.00108	0.000306	
Carbon tetrachloride	2	4	0.005	ND	0.00108	0.000298	
1,2-Dichloroethane (EDC)	0.9	3	0.005	ND	0.00108	0.000409	
Benzene	2	5	0.005	ND	0.00108	0.000234	
Trichloroethene	3	10	0.01	ND	0.00108	0.000315	
1,2-Dichloropropane	2	5	0.005	ND	0.00108	0.000253	
1,4-Dioxane	123-91-1	NS	NS	ND	0.216	0.039	
Bromodichloromethane	75-27-4	3	0.005	ND	0.00108	0.000216	
cis-1,3-Dichloropropene	10061-01-5	NS	NS	ND	0.00108	0.000232	
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	ND	0.00216	0.000793	
Toluene	108-88-3	6300	7	ND	0.00108	0.000247	
trans-1,3-Dichloropropene	10061-02-6	NS	NS	ND	0.00108	0.00028	
1,1,2-Trichloroethane	79-00-5	2	0.02	ND	0.00108	0.000332	
Tetrachloroethene	127-18-4	43	0.005	ND	0.00108	0.000404	
2-Hexanone	591-78-6	NS	NS	ND	0.00216	0.00166	
Dibromochloromethane	124-48-1	3	0.005	ND	0.00108	0.000297	
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.005	ND	0.00108	0.000214	
Chlorobenzene	108-90-7	510	0.6	ND	0.00108	0.000246	

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Ethylbenzene	100-41-4	7800	110000	13	ND	0.00108	0.000298
Total Xylenes	1330-20-7	12000	170000	19	ND	0.00216	0.00116
Styrene	100-42-5	90	260	3	ND	0.00108	0.00036
Bromoform	75-25-2	81	280	0.03	ND	0.00108	0.000375
Isopropylbenzene	98-82-8	NS	NS	NS	ND	0.00108	0.000367
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	ND	0.00108	0.000473
n-Propylbenzene	103-65-1	NS	NS	NS	ND	0.00108	0.0003
1,3,5-Trimethylbenzene	108-67-8	NS	NS	NS	ND	0.00108	0.000488
tert-Butylbenzene	98-06-6	NS	NS	NS	ND	0.00108	0.000345
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	ND	0.00108	0.000558
sec-Butylbenzene	135-98-8	NS	NS	NS	ND	0.00108	0.000359
1,3-Dichlorobenzene	541-73-1	5300	59000	19	ND	0.00108	0.000319
4-Isopropyltoluene	99-87-6	NS	NS	NS	ND	0.00108	0.000415
1,4-Dichlorobenzene	106-46-7	5	13	2	ND	0.00108	0.000319
n-Butylbenzene	104-51-8	NS	NS	NS	ND	0.00108	0.000446
1,2-Dichlorobenzene	95-50-1	5300	59000	17	ND	0.00108	0.0003
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.2	0.005	ND	0.00108	0.000596
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	ND	0.00108	0.000423
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	ND	0.00108	0.000427
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	ND	0.00108	0.000477
Methyl acetate	79-20-9	78000	NS	22	ND	0.00216	0.000332
Cyclohexane	110-82-7	NS	NS	NS	ND	0.00108	0.000491
Methylcyclohexane	108-87-2	NS	NS	NS	ND	0.00108	0.000314
1,3-Dichloropropene (cis- and trans-)	542-75-6	2	7	0.005	ND	0.00108	0.00028
TOTAL TIC's:		NS	NS	NS	ND		NA

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1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	NS	NS	NS	NS	NS	NS	0.033	0.023
2,3,4,6-Tetrachlorophenol	58-90-2	NS	NS	NS	NS	NS	NS	NS	NS	0.033	0.028
4,6-Dinitro-2-methylphenol	534-52-1	6	68	0.3	0.3	0.3	0.3	0.3	0.3	0.033	0.032
N-Nitrosodiphenylamine	86-30-6	99	390	0.4	0.4	0.4	0.4	0.4	0.4	0.033	0.031
1,2-Diphenylhydrazine	122-66-7	0.7	2	0.7	0.7	0.7	0.7	0.7	0.7	0.033	0.032
4-Bromophenyl phenyl ether	101-55-3	NS	NS	NS	NS	NS	NS	NS	NS	0.033	0.023
Hexachlorobenzene	118-74-1	0.3	1	0.2	0.2	0.2	0.2	0.2	0.2	0.033	0.023
Atrazine	1912-24-9	210	2400	0.2	0.2	0.2	0.2	0.2	0.2	0.033	0.025
Pentachlorophenol	87-86-5	0.9	3	0.3	0.3	0.3	0.3	0.3	0.3	0.033	0.022
Phenanthrene	85-01-8	NS	300000	NS	NS	NS	NS	NS	NS	0.033	0.031
Anthracene	120-12-7	17000	30000	2400	2400	2400	2400	2400	2400	0.033	0.032
Carbazole	86-74-8	24	96	NS	NS	NS	NS	NS	NS	0.033	0.029
Di-n-butyl phthalate	84-74-2	6100	68000	760	760	760	760	760	760	0.033	0.028
Fluoranthene	206-44-0	2300	24000	1300	1300	1300	1300	1300	1300	0.033	0.032
Benzidine	92-87-5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.033	0.025
Pyrene	129-00-0	1700	18000	840	840	840	840	840	840	0.033	0.030
Butyl benzyl phthalate	85-68-7	1200	14000	230	230	230	230	230	230	0.033	0.031
3,3'-Dichlorobenzidine	91-94-1	1	4	0.2	0.2	0.2	0.2	0.2	0.2	0.033	0.029
Benzo[a]anthracene	56-55-3	5	17	0.8	0.8	0.8	0.8	0.8	0.8	0.033	0.020
Chrysene	218-01-9	450	1700	80	80	80	80	80	80	0.033	0.031
Bis(2-ethylhexyl) phthalate	117-81-7	35	140	1200	1200	1200	1200	1200	1200	0.033	0.030
Di-n-octyl phthalate	117-84-0	2400	27000	3300	3300	3300	3300	3300	3300	0.033	0.031
Benzo[b]fluoranthene	205-99-2	5	17	2	2	2	2	2	2	0.033	0.032
Benzo[k]fluoranthene	207-08-9	45	170	25	25	25	25	25	25	0.033	0.028
Benzo[a]pyrene	50-32-8	0.5	2	0.2	0.2	0.2	0.2	0.2	0.2	0.033	0.029
Indeno[1,2,3-cd]pyrene	193-39-5	5	17	7	7	7	7	7	7	0.033	0.032
Dibenz[a,h]anthracene	53-70-3	0.5	2	0.8	0.8	0.8	0.8	0.8	0.8	0.033	0.030
Benzo[g,h,i]perylene	191-24-2	380000	30000	NS	NS	NS	NS	NS	NS	0.033	0.032
Dinitrotoluene (2,4- and 2,6-)	25321-14-6	0.7	3	0.2	0.2	0.2	0.2	0.2	0.2	0.033	0.032
TOTAL TIC's:		NS	NS	NS	NS	NS	NS	NS	NS	0.033	NA

PCB's (mg/Kg)							Conc	Q	RL	MDL
Aroclor-1016	12674-11-2	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1221	11104-28-2	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1232	11141-16-5	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1242	53469-21-9	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1248	12672-29-6	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1254	11097-69-1	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1260	11096-82-5	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1262	37324-23-5	NS	NS	NS	NS	NS	ND		0.00327	0.00131
Aroclor-1268	11100-14-4	NS	NS	NS	NS	NS	ND		0.00327	0.00131
PCBs	1336-36-3	0.2	1	0.2	0.2	0.2	ND		0.00327	0.00131

Standards are based upon published regulatory information.  
Users are encouraged to consult appropriate regulatory sources for current values and updates.  
IAL assumes no responsibility for the accuracy of these values.

Pesticides (mg/Kg)	Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.1	0.5	0.002
beta-BHC	319-85-7	0.4	2	0.002
gamma-BHC (Lindane)	58-89-9	0.4	2	0.002
delta-BHC	319-86-8	NS	NS	NS
Heptachlor	76-44-8	0.1	0.7	0.5
Aldrin	309-00-2	0.04	0.2	0.2
Heptachlor epoxide	1024-57-3	0.07	0.3	0.01
Endosulfan I	959-98-8	NS	NS	NS
4,4'-DDE	72-55-9	2	9	18
Dieldrin	60-57-1	0.04	0.2	0.003
Endrin	72-20-8	23	340	1
Endosulfan II	33213-65-9	NS	NS	NS
4,4'-DDD	72-54-8	3	13	4
Endrin aldehyde	7421-93-4	NS	NS	NS
Endosulfan sulfate	1031-07-8	470	6800	2
4,4'-DDT	50-29-3	2	8	11
Endrin ketone	53494-70-5	NS	NS	NS
Methoxychlor	72-43-5	390	5700	160
alpha-Chlordane	5103-71-9	NS	NS	NS
gamma-Chlordane	5103-74-2	NS	NS	NS
Toxaphene	8001-35-2	0.6	3	0.3
Endosulfan (I and II)	115-29-7	470	6800	4
Chlordane (alpha and gamma)	57-74-9	0.2	1	0.05

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S S Environmental  
 Project Name: MOUNT HOPE  
 IAL SDG No: E20-02898

NJ-EPH-C40 (mg/Kg) C9-C40	IALC9C40	NS	NS	NS	Conc ND	Q	RL 48.7	MDL 19.5

Standards are based upon published regulatory information.  
 Users are encouraged to consult appropriate regulatory sources for current values and updates.  
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Metals (mg/Kg)										Conc	Q	RL	MDL
Aluminum	7429-90-5	78000	NS	6000	2040	5.21						5.21	2.08
Antimony	7440-36-0	31	450	6	0.360	J	0.521					0.521	0.208
Arsenic	7440-38-2	19	19	19	1.14		0.521					0.521	0.156
Barium	7440-39-3	16000	59000	2100	8.52		0.521					0.521	0.260
Beryllium	7440-41-7	16	140	0.7	0.674		0.521					0.521	0.156
Cadmium	7440-43-9	78	78	2	ND		0.521					0.521	0.313
Calcium	7440-70-2	NS	NS	NS	3740		52.1					15.6	15.6
Chromium	7440-47-3	NS	NS	NS	3.72		0.521					0.521	0.260
Cobalt	7440-48-4	1600	590	90	3.70		0.521					0.521	0.156
Copper	7440-50-8	3100	45000	11000	9.66		0.521					0.521	0.365
Iron	7439-89-6	NS	NS	NS	9670		52.1					52.1	15.6
Lead	7439-92-1	400	800	90	2.02		0.521					0.521	0.260
Magnesium	7439-95-4	NS	NS	NS	2260		52.1					52.1	15.6
Manganese	7439-96-5	11000	5900	65	65.7		0.521					0.521	0.365
Mercury	7439-97-6	23	65	0.1	ND		0.025					0.025	0.010
Nickel	7440-02-0	1600	23000	48	4.31		0.521					0.521	0.365
Potassium	7440-09-7	NS	NS	NS	1240		52.1					52.1	20.8
Selenium	7782-49-2	390	5700	11	4.01		3.65					3.65	1.56
Silver	7440-22-4	390	5700	1	ND		0.521					0.521	0.313
Sodium	7440-23-5	NS	NS	NS	161		52.1					52.1	20.8
Thallium	7440-28-0	withdrawn	withdrawn	3	0.455		J	0.521				0.521	0.260
Vanadium	7440-62-2	78	1100	NS	7.69		0.521					0.521	0.260
Zinc	7440-66-6	23000	110000	930	10.6		5.21					5.21	1.04

Standards are based upon published regulatory information.  
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General Analytical		Conc	Q	RL	MDL
Hexavalent Chromium-mg/Kg	18540-29-9	240	20	1.00	0.379
pH/Corrosivity-SU	SRP 6	NS	NS	NA	NA
Trivalent (III) Chromium-mg/Kg	16065-83-1	120000	NS	1.00	0.379

Standards are based upon published regulatory information.  
 Users are encouraged to consult appropriate regulatory sources for current values and updates.  
 IAL assumes no responsibility for the accuracy of these values.

Subcontracted Data	NS	NS	NS	Conc ?	Q	RL ?	MDL NA
NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017							
<b>BOLD Conc</b>							
Indicates a concentration that exceeds applicable criteria.							
<b>BOLD RL</b>							
Indicates RL that exceeds applicable criteria.							
<b>BOLD MDL</b>							
Indicates MDL that exceeds applicable criteria.							
NS = No Standard Available							
~ = Sample not analyzed for							
ND = Analyzed for but Not Detected at the MDL							
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.							
? = Results not available							
Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section							

Standards are based upon published regulatory information.  
 Users are encouraged to consult appropriate regulatory sources for current values and updates.  
 IAL assumes no responsibility for the accuracy of these values.

# S & S ENVIRONMENTAL SCIENCES, INC.

*Environmental Engineering, Testing and Consultation*

98 Sand Park Road, Cedar Grove, NJ 07009  
Tel (973) 857-7188 Fax (973) 239-8380

Kamil Sor, Ph.D.  
Orhun Sor, P.E.  
Atilla Sencar, P.E.

This report is the confidential property of the Client, and information contained may not be published or reproduced without our written permission.

<b>Client:</b>	Tilcon New York, Inc.				
<b>Project:</b>	Pompton Lakes, NJ (NJDEP-SRS)				
<b>Subject:</b>	Laboratory Analysis of Aggregate Sample (Quarry Fines)				
<b>Job No.:</b>	06E41	<b>Report Number:</b>	20-E-62	<b>Date:</b>	5/21/2020

We present herewith the laboratory test results of an aggregate sample (identified as Quarry Fines) delivered to our laboratory on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours

S & S ENVIRONMENTAL SCIENCES, INC.



Kamil Sor, Ph.D.

President

KS/ag

Attachments:

- (1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client

Steve O'Reilly

email: [soreilly@tilconny.com](mailto:soreilly@tilconny.com)

# S&S ENVIRONMENTAL SCIENCES, INC.

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NJDEP Lab Certification No. 07073

## SAMPLE CHAIN OF CUSTODY

CLIENT:	TILCON	DATE:	4-28-20
ADDRESS:		SSES JOB NO.	
CONTACT:		TEL. #:	
PROJECT:	Pompton Lakes, NJ	PROJECT LAB ID #:	20-048

SAMPLE NUMBER	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	NO. OF BOTTLES	ANALYSES REQUESTED
20-048	4-28-20	10:05	Grab		NY-NJ Clean Air

Comments:

PRESERVATIVE	
Cooled at 4°C?	x
HCl	
HNO <sub>3</sub>	
H <sub>2</sub> SO <sub>4</sub>	
NaOH	
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	
Other	

pH Meter No.:	Reading	T°C	Time	Analyst
pH				
pH Dup.				

Sampled By: S. O.

RELINQUISHED BY:

*[Signature]*  
\_\_\_\_\_  
\_\_\_\_\_

RECEIVED BY:

*[Signature]*  
\_\_\_\_\_  
\_\_\_\_\_

DATE AND TIME:

4-28-20 11:10  
\_\_\_\_\_  
\_\_\_\_\_



Integrated Analytical Labs  
273 Franklin Road  
Randolph, NJ 07869

# Chain of Custody Record

Contact Us: 973-361-4252  
Fax: 973-989-5288  
Web: www.ialonline.com

<b>Reporting Information</b>			<b>Deliverables</b>			<b>Edds</b>			<b>Concentrations Expected</b>					
<b>REPORT TO:</b> Address: _____ Attn: <u>Same</u> FAX #: _____			<b>NJ, CT, PA</b> <input type="checkbox"/> Results Only (Level I) <input checked="" type="checkbox"/> Reduced (Level III/IV) <input type="checkbox"/> Regulatory/Fair (Level IV)			<b>NY</b> <input type="checkbox"/> ASP Category A <input type="checkbox"/> ASP Category B			<b>NJ SRP</b> <input type="checkbox"/> NYSDEC Equils <input type="checkbox"/> lab approved custom EDD <input type="checkbox"/> NO EDD REQ'D			Low    Med    High Known Hazard: <input type="checkbox"/> YES <input type="checkbox"/> NO Describe: _____		
<b>INVOICE TO:</b> Address: _____ Attn: _____			<b>Turn-Around Time (TAT)</b>			<b>Regulatory Requirement</b>			<b>New York</b>					
Standard (10 business days) Verbal Rush/delta needed (only if pre-approved)**			Other - call for price <b>Hard Copy: Std 3 week</b>			<input type="checkbox"/> GWQS <input checked="" type="checkbox"/> MSW <input type="checkbox"/> SRS <input type="checkbox"/> Ecological <input type="checkbox"/> DW <input type="checkbox"/> SPLP			<input type="checkbox"/> AWQS (TOGS Table 1) <input type="checkbox"/> GWEL (TOGS Table 5) <input type="checkbox"/> Part 375-6.8(a) - Unrestricted <input checked="" type="checkbox"/> Part 375-6.8(b) - Restricted <input checked="" type="checkbox"/> CP-51 Table 2 of 3 (Detection required) Other States / Criteria					
<b>PO #</b> <u>20-048</u> <b>Quote #</b> _____ <b>Sample Matrix</b> Oil - Oil S - Soil SED - Sediment SOL - Solid (specify) LIQ - Liquid (specify) W - Wipes			<b>Petroleum Hydrocarbons - Selection is REQUIRED</b> <input type="checkbox"/> NJ EPH-DRO - Category 1 <input type="checkbox"/> NJ EPH-C40 - Category 2 <input type="checkbox"/> NJ EPH-Fractionated - Cat 2 <input type="checkbox"/> DRO-8915 TAT for PHC, if other than 2 weeks: <input type="checkbox"/> CT ETPH <input type="checkbox"/> DRO-8915			<input type="checkbox"/> Pennsylvania Act 2 <input type="checkbox"/> CT RCSA 22a-133k1-k3 <input type="checkbox"/> TSCA PCBs OTHER Regulatory Requirements - specify in comments: Sample Specific Notes:			<input type="checkbox"/> Pennsylvania Act 2 <input type="checkbox"/> CT RCSA 22a-133k1-k3 <input type="checkbox"/> TSCA PCBs OTHER Regulatory Requirements - specify in comments: Sample Specific Notes:					
<b>COMPLETED BY IAL:</b> Field Sampling _____ Equipment Rental _____			<b>SAMPLE INFORMATION</b>			ANALYTICAL PARAMETERS (please note if contingent)			FOR LAB USE ONLY					
<b>Client ID</b> <u>20-048</u>			<b>Sampling</b> Date: <u>4-22-20</u> Time: <u>10:05</u> IAL # <u>6</u>			Matrix: <u>PH</u>			SDG #: <u>2897</u>					
<b>Depth (ft only)</b> _____			<b>Container Code:</b> A = Amber Glass B = Plastic C = Vial D = Glass E = EnCore T = Terracore			Preservative (use code) Container Type (use code)			Cooler Temp: <u>4</u> °C Date: <u>4/28/20</u> Time: <u>1415</u>					
Preservative Code: 1 = None 2 = HCl 3 = HNO3 4 = MeOH 5 = NaOH 6 = H2SO4 7 = Other			Carrier (check one): <input type="checkbox"/> IAL Courier <input type="checkbox"/> Client Courier <input type="checkbox"/> FedEx/UPS**			Special Instructions/QC Requirements & Comments: <u>MSW Anc SRS Parameters NY-NYS Cleanup 11</u>			Recycled By (Signature and Company): _____					
Samples previously analyzed by IAL? YES / NO			Tracking #: _____			LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK			Certification IDs: TN (TN01284); CT (PH-0689); NJ (14751); NY (11402); PA (88-00773)					

SAMPLE RECEIPT VERIFICATION

CASE NO: E 20 02897

CLIENT: 575

COOLER TEMPERATURE: 2° - 6°C: [checked]

( See Chain of Custody)

Comments

COC: COMPLETE / INCOMPLETE

KEY

[checked] = YES/NA
[unchecked] = NO

VOA received: [checked] Encore 259
[unchecked] Terra Core

[unchecked] IGW - Methanol
[unchecked] No Preservative

[checked] Bottles Intact
[checked] no-Missing Bottles
[checked] no-Extra Bottles

[checked] Sufficient Sample Volume
[checked] no-headspace/bubbles in VO's
[checked] Labels intact/correct
[checked] pH Check (exclude VO's)1
[checked] Correct bottles/preservative
[checked] Sufficient Holding/Prep Time1

[unchecked] Multiphasic Sample
[unchecked] Sample to be Subcontracted
[checked] Chain of Custody is Clear

1 All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP

DATE 4/28/20

CORRECTIVE ACTION REQUIRED: YES [unchecked] (SEE BELOW) NO [checked]

If COC is NOT clear, STOP until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [unchecked] Date/ Time: NO [unchecked]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL mf

DATE 4/29/20

208 556

**REPORTING & BILLING**

**CLIENT & PROJECT**

Name: Integrated Analytical Laboratories LLC  
 Contact: Thomas Malanga  
 Fax #: [ ]  
 Email to: imalanga@ialonline.com  
 Address: 273 Franklin Road  
 Report to: Thomas Malanga  
 Randolph, NJ 07869  
 Address:  
 Telephone #: 973-361-4252  
 Fax #: 973-989-5288  
 Project Name: E20-02897  
 Invoice to: Thomas Malanga  
 Project Location (State): NJ  
 Address:  
 Project Manager:  
 Reference ID#: PO#

Turnaround Time  
 Verbal/Fax  
 24 hr\* 48 hr\* 72 hr\* 1 wk\* 2 wk 3 wk  
 Other: 6 Business Days  
 Report Format  
 Reduced / Level III  
 Special Requirements  
 Hard Copy  
 72 hr\* 1 wk\* 2 wk\* 3 wk  
 Other:  
 \*Prior to sample arrival, Lab notification is required.

**ANALYTICAL PARAMETERS / PRESERVATIVES**

1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
Preservative 1 = HCL; 2 = NaOH; 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> ; 5 = MeOH; 6 = Other													

Total Cyanide (9012B)

Run

**SAMPLE INFORMATION**

Sample ID	Sample Depth (in Feet)	Sampling Date	Sampling Time	Matrix	# of Containers
E20-02897-001		4/28/20	10-05	Soil	1



460-208556 Chain of Custody

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

**EMAIL CONFIRMATION REQUIRED**

**CUSTODY LOG**

Signature/Company	Date	Time	Signature/Company
Relinquished by: <i>[Signature]</i>	5/1/20	11:36	Received by: <i>[Signature]</i> 5/1/20 11:36
Relinquished by:			Received by:
Relinquished by:			Received by:

Lab Case # [ ]

4.9% IR II NORMS

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: POMPTON LAKES**  
**Lab Case No.: E20-02897**

<b>PARAMETER(Units)</b>	<b>Lab ID:</b>	<b>02897-001</b>	
	<b>Client ID:</b>	<b>20-048</b>	
	<b>Matrix:</b>	<b>Soil</b>	
	<b>Sampled Date</b>	<b>4/28/20</b>	
	<b>Conc</b>	<b>Q</b>	<b>MDL</b>
<b>Volatiles (Units)</b>		<b>(mg/Kg)</b>	
Dichlorodifluoromethane	ND		0.000369
Chloromethane	ND		0.000405
Vinyl chloride	ND		0.000403
Bromomethane	ND		0.000568
Chloroethane	ND		0.000452
Trichlorofluoromethane	ND		0.000382
Acrolein	ND		0.00461
1,1-Dichloroethene	ND		0.000388
Acetone	ND		0.00242
Carbon disulfide	0.00198		0.00024
Methylene chloride	ND		0.00184
Acrylonitrile	ND		0.00408
tert-Butyl alcohol (TBA)	ND		0.000968
trans-1,2-Dichloroethene	ND		0.00038
Methyl tert-butyl ether (MTBE)	ND		0.000282
1,1-Dichloroethane	ND		0.000347
cis-1,2-Dichloroethene	ND		0.000329
2-Butanone (MEK)	ND		0.000903
Bromochloromethane	ND		0.000276
Chloroform	ND		0.000535
1,1,1-Trichloroethane	ND		0.000269
Carbon tetrachloride	ND		0.000262
1,2-Dichloroethane (EDC)	ND		0.00036
Benzene	ND		0.000206
Trichloroethene	ND		0.000277
1,2-Dichloropropane	ND		0.000222
1,4-Dioxane	ND		0.035
Bromodichloromethane	ND		0.00019
cis-1,3-Dichloropropene	ND		0.000204
4-Methyl-2-pentanone (MIBK)	ND		0.000697
Toluene	ND		0.000218
trans-1,3-Dichloropropene	ND		0.000246
1,1,2-Trichloroethane	ND		0.000292
Tetrachloroethene	ND		0.000355
2-Hexanone	ND		0.00146
Dibromochloromethane	ND		0.000261
1,2-Dibromoethane (EDB)	ND		0.000188
Chlorobenzene	ND		0.000217
Ethylbenzene	ND		0.000262
Total Xylenes	ND		0.00102
Styrene	ND		0.000316
Bromoform	ND		0.00033
Isopropylbenzene	ND		0.000323
1,1,2,2-Tetrachloroethane	ND		0.000416
n-Propylbenzene	ND		0.000264

ND = Analyzed for but Not Detected at the MDL

Continued on next page.



**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: POMPTON LAKES**  
**Lab Case No.: E20-02897**

Lab ID:	02897-001		
Client ID:	20-048		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>		
1,3,5-Trimethylbenzene	ND		0.000429
tert-Butylbenzene	ND		0.000303
1,2,4-Trimethylbenzene	ND		0.000491
sec-Butylbenzene	ND		0.000315
1,3-Dichlorobenzene	ND		0.00028
4-Isopropyltoluene	ND		0.000365
1,4-Dichlorobenzene	ND		0.00028
n-Butylbenzene	ND		0.000392
1,2-Dichlorobenzene	ND		0.000264
1,2-Dibromo-3-chloropropane	ND		0.000524
1,2,4-Trichlorobenzene	ND		0.000372
1,2,3-Trichlorobenzene	ND		0.000375
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00042
Methyl acetate	ND		0.000292
Cyclohexane	ND		0.000432
Methylcyclohexane	ND		0.000276
1,3-Dichloropropene (cis- and trans-)	ND		0.000246
<b>TOTAL TIC's:</b>	ND		
<b>Semivolatiles (Units)</b>	<i>(mg/Kg)</i>		
N-Nitrosodimethylamine	ND		0.028
Benzaldehyde	ND		0.026
Phenol	ND		0.032
Aniline	ND		0.021
Bis(2-chloroethyl) ether	ND		0.026
2-Chlorophenol	ND		0.026
Benzyl alcohol	ND		0.031
2-Methylphenol	ND		0.019
2,2'-Oxybis(1-Chloropropane)	ND		0.031
4-Methylphenol **	ND		0.023
N-Nitrosodi-n-propylamine	ND		0.023
Acetophenone	ND		0.027
Hexachloroethane	ND		0.026
Nitrobenzene	ND		0.021
Isophorone	ND		0.024
2-Nitrophenol	ND		0.030
2,4-Dimethylphenol	ND		0.019
Bis(2-chloroethoxy) methane	ND		0.026
Benzoic acid	ND		0.027
2,4-Dichlorophenol	ND		0.026
Naphthalene	ND		0.026
4-Chloroaniline	ND		0.023
Hexachlorobutadiene	ND		0.021
Caprolactam	ND		0.025

ND = Analyzed for but Not Detected at the MDL  
Continued on next page.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: POMPTON LAKES**  
**Lab Case No.: E20-02897**

<b>PARAMETER(Units)</b>	<b>Lab ID:</b>	<b>02897-001</b>
	<b>Client ID:</b>	<b>20-048</b>
	<b>Matrix:</b>	<b>Soil</b>
	<b>Sampled Date</b>	<b>4/28/20</b>
	<b>Conc</b>	<b>Q MDL</b>
<b>Semivolatiles (Units)</b>	<b>(mg/Kg)</b>	
4-Chloro-3-methylphenol	ND	0.022
2-Methylnaphthalene	ND	0.021
Hexachlorocyclopentadiene	ND	0.028
2,4,6-Trichlorophenol	ND	0.026
2,4,5-Trichlorophenol	ND	0.028
1,1'-Biphenyl	ND	0.027
2-Chloronaphthalene	ND	0.025
2-Nitroaniline	ND	0.025
Dimethyl phthalate	ND	0.024
2,6-Dinitrotoluene	ND	0.031
Acenaphthylene	ND	0.026
3-Nitroaniline	ND	0.024
Acenaphthene	ND	0.027
2,4-Dinitrophenol	ND	0.031
4-Nitrophenol	ND	0.030
2,4-Dinitrotoluene	ND	0.029
Dibenzofuran	ND	0.024
Diethyl phthalate	ND	0.019
Fluorene	ND	0.028
4-Chlorophenyl phenyl ether	ND	0.027
4-Nitroaniline	ND	0.020
1,2,4,5-Tetrachlorobenzene	ND	0.023
2,3,4,6-Tetrachlorophenol	ND	0.028
4,6-Dinitro-2-methylphenol	ND	0.031
N-Nitrosodiphenylamine	ND	0.031
1,2-Diphenylhydrazine	ND	0.032
4-Bromophenyl phenyl ether	ND	0.023
Hexachlorobenzene	ND	0.023
Atrazine	ND	0.025
Pentachlorophenol	ND	0.022
Phenanthrene	ND	0.031
Anthracene	ND	0.032
Carbazole	ND	0.029
Di-n-butyl phthalate	ND	0.027
Fluoranthene	ND	0.031
Benzidine	ND	0.025
Pyrene	ND	0.029
Butyl benzyl phthalate	ND	0.030
3,3'-Dichlorobenzidine	ND	0.029
Benzo[a]anthracene	ND	0.019
Chrysene	ND	0.030
Bis(2-ethylhexyl) phthalate	ND	0.029
Di-n-octyl phthalate	ND	0.030
Benzo[b]fluoranthene	ND	0.031
Benzo[k]fluoranthene	ND	0.027

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: POMPTON LAKES**  
**Lab Case No.: E20-02897**

<b>Lab ID:</b>	<b>02897-001</b>		
<b>Client ID:</b>	<b>20-048</b>		
<b>Matrix:</b>	<b>Soil</b>		
<b>Sampled Date</b>	<b>4/28/20</b>		
<b>PARAMETER(Units)</b>	Conc	Q	MDL
<b>Semivolatiles (Units)</b>			
	<i>(mg/Kg)</i>		
Benzo[a]pyrene	ND		0.028
Indeno[1,2,3-cd]pyrene	ND		0.031
Dibenz[a,h]anthracene	ND		0.030
Benzo[g,h,i]perylene	ND		0.031
Dinitrotoluene (2,4- and 2,6-)	ND		0.031
<b>TOTAL TIC's:</b>			
	ND		
<b>PCB's (Units)</b>			
	<i>(mg/Kg)</i>		
Aroclor-1016	ND		0.00132
Aroclor-1221	ND		0.00132
Aroclor-1232	ND		0.00132
Aroclor-1242	ND		0.00132
Aroclor-1248	ND		0.00132
Aroclor-1254	ND		0.00132
Aroclor-1260	ND		0.00132
Aroclor-1262	ND		0.00132
Aroclor-1268	ND		0.00132
PCBs	ND		0.00132
<b>Pesticides (Units)</b>			
	<i>(mg/Kg)</i>		
alpha-BHC	ND		0.000329
beta-BHC	ND		0.000329
gamma-BHC (Lindane)	ND		0.000329
delta-BHC	ND		0.000329
Heptachlor	ND		0.000329
Aldrin	ND		0.000329
Heptachlor epoxide	ND		0.000329
Endosulfan I	ND		0.000329
4,4'-DDE	ND		0.000329
Dieldrin	ND		0.000329
Endrin	ND		0.000329
Endosulfan II	ND		0.000329
4,4'-DDD	ND		0.000329
Endrin aldehyde	ND		0.000329
Endosulfan sulfate	ND		0.000329
4,4'-DDT	ND		0.000329
Endrin ketone	ND		0.000329
Methoxychlor	ND		0.000329
alpha-Chlordane	ND		0.000329
gamma-Chlordane	ND		0.000329
Toxaphene	ND		0.00395
Endosulfan (I and II)	ND		0.000329
Chlordane (alpha and gamma)	ND		0.000329

ND = Analyzed for but Not Detected at the MDL.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: POMPTON LAKES**  
**Lab Case No.: E20-02897**

Lab ID:	02897-001		
Client ID:	20-048		
Matrix:	Soil		
Sampled Date	4/28/20		
PARAMETER(Units)	Conc	Q	MDL
<b>Herbicides (Units)</b>			
	<i>(mg/Kg)</i>		
Dalapon	ND		0.00658
Dicamba	ND		0.00658
2,4-D	ND		0.00658
2,4,5-TP (Silvex)	ND		0.00658
2,4,5-T	ND		0.00658
2,4-DB	ND		0.00658
Dinoseb	ND		0.00658
<b>NJ-EPH-C40 (Units)</b>			
	<i>(mg/Kg)</i>		
C9-C40	21.1	J	19.9
<b>Alcohols (Units)</b>			
	<i>(mg/Kg)</i>		
Methanol	ND		1.97
<b>Metals (Units)</b>			
	<i>(mg/Kg)</i>		
Aluminum	4640		2.17
Antimony	ND		0.217
Arsenic	0.687		0.163
Barium	41.1		0.272
Beryllium	0.316	J	0.163
Cadmium	ND		0.326
Calcium	3920		16.3
Chromium	16.3		0.272
Cobalt	8.86		0.163
Copper	50.4		0.380
Iron	13500		16.3
Lead	3.21		0.272
Magnesium	4030		16.3
Manganese	94.9		0.380
Mercury	ND		0.013
Nickel	23.0		0.380
Potassium	3050		21.7
Selenium	3.37	J	1.63
Silver	ND		0.326
Sodium	116		21.7
Thallium	ND		0.272
Vanadium	23.6		0.272
Zinc	19.4		1.09

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**SUMMARY REPORT**  
**Client: S & S Environmental**  
**Project: POMPTON LAKES**  
**Lab Case No.: E20-02897**

<b>Lab ID:</b>	<b>02897-001</b>		
<b>Client ID:</b>	<b>20-048</b>		
<b>Matrix:</b>	<b>Soil</b>		
<b>Sampled Date</b>	<b>4/28/20</b>		
<b>PARAMETER(Units)</b>	<b>Conc</b>	<b>Q</b>	<b>MDL</b>
<b>General Analytical (Units)</b>			
Hexavalent Chromium(mg/Kg)	ND		0.380
pH/Corrosivity(SU)	8.38		NA
Trivalent (III) Chromium(mg/Kg)	16.3		0.380
<b>Subcontracted Data (Units)</b>			
	<i>(mg/Kg)</i>		
	*		*

ND = Analyzed for but Not Detected at the MDL

\*Subcontracted Results for Total Cyanide (9012B) by Test America - Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.  
 Eurofins TestAmerica, Edison  
 SUMMARY OF ANALYTICAL RESULTS: 460-208556-1  
 Job Description: E20-02897

For:  
 Integrated Analytical Laboratories LLC  
 PO BOX 8026  
 Parsippany, New Jersey 07054

Client ID	NJ_SRS7_26D_Tbl1A	NJ_SRS7_26D_Tbl1B	IGW Screening	NIDEF	E20-02897-001
Lab Sample ID	Residential	Non-Residential	IGW Screening		460-208556-1
Sampling Date	Sept_2017	Sept_2017	Nov_2013		04/28/2020 10:05:00
Matrix					Soil
<b>SOIL BY 9012B</b>					
Cyanide, Total (mg/kg)	47	680	20		
				Result	Q
					MDL
				0.12	U
					0.12

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

Lab Contact:  
 Jill Miller  
 Senior Project Manager  
 (484)685-0871

Sample #: Field ID: Lab ID: Date Sampled: Depth(ft):	NJDEP SOIL REMEDIATION STANDARDS				20-048			
	CAS	Residential SRS (mg/Kg)	Non-Res SRS (mg/Kg)	Default IGW Screening Level (mg/Kg)	Conc	Q	RL	MDL
<b>Volatiles (mg/Kg)</b>								
Dichlorodifluoromethane	75-71-8	490	230000	39	ND	0.00095	0.000369	
Chloromethane	74-87-3	4	12	NS	ND	0.00095	0.000405	
Vinyl chloride	75-01-4	0.7	2	0.005	ND	0.00095	0.000403	
Bromomethane	74-83-9	25	59	0.04	ND	0.00095	0.000568	
Chloroethane	75-00-3	220	1100	NS	ND	0.00095	0.000452	
Trichlorofluoromethane	75-69-4	23000	340000	34	ND	0.00095	0.000382	
Acrolein	107-02-8	0.5	1	0.5	ND	0.019	0.00461	
1,1-Dichloroethene	75-35-4	11	150	0.008	ND	0.00095	0.000388	
Acetone	67-64-1	70000	NS	19	ND	0.0095	0.00242	
Carbon disulfide	75-15-0	7800	110000	6	0.00198	0.00095	0.00024	
Methylene chloride	75-09-2	46	230	0.01	ND	0.0019	0.00184	
Acrylonitrile	107-13-1	0.9	3	0.5	ND	0.019	0.00408	
tert-Butyl alcohol (TBA)	75-65-0	1400	11000	0.3	ND	0.0038	0.000968	
trans-1,2-Dichloroethene	156-60-5	300	720	0.6	ND	0.00095	0.00038	
Methyl tert-butyl ether (MTBE)	1634-04-4	110	320	0.2	ND	0.00095	0.000282	
1,1-Dichloroethane	75-34-3	8	24	0.2	ND	0.00095	0.000347	
cis-1,2-Dichloroethene	156-59-2	230	560	0.3	ND	0.00095	0.000329	
2-Butanone (MEK)	78-93-3	3100	44000	0.9	ND	0.0038	0.000903	
Bromochloromethane	74-97-5	NS	NS	NS	ND	0.00095	0.000276	
Chloroform	67-66-3	0.6	2	0.4	ND	0.00095	0.000535	
1,1,1-Trichloroethane	71-55-6	160000	NS	0.3	ND	0.00095	0.000269	
Carbon tetrachloride	56-23-5	2	4	0.005	ND	0.00095	0.000262	
1,2-Dichloroethane (EDC)	107-06-2	0.9	3	0.005	ND	0.00095	0.00036	
Benzene	71-43-2	2	5	0.005	ND	0.00095	0.000206	
Trichloroethene	79-01-6	3	10	0.01	ND	0.00095	0.000277	
1,2-Dichloropropane	78-87-5	2	5	0.005	ND	0.00095	0.000222	
1,4-Dioxane	123-91-1	NS	NS	NS	ND	0.190	0.035	
Bromodichloromethane	75-27-4	1	3	0.005	ND	0.00095	0.00019	
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	ND	0.00095	0.000204	
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	ND	0.0019	0.000697	
Toluene	108-88-3	6300	91000	7	ND	0.00095	0.000218	
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	ND	0.00095	0.000246	
1,1,2-Trichloroethane	79-00-5	2	6	0.02	ND	0.00095	0.000292	
Tetrachloroethene	127-18-4	43	1500	0.005	ND	0.00095	0.000355	
2-Hexanone	591-78-6	NS	NS	NS	ND	0.0019	0.00146	
Dibromochloromethane	124-48-1	3	8	0.005	ND	0.00095	0.000261	
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.04	0.005	ND	0.00095	0.000188	
Chlorobenzene	108-90-7	510	7400	0.6	ND	0.00095	0.000217	

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Ethylbenzene	100-41-4	7800	110000	13	ND	0.00095	0.000262
Total Xylenes	1330-20-7	12000	170000	19	ND	0.0019	0.00102
Styrene	100-42-5	90	260	3	ND	0.00095	0.000316
Bromoform	75-25-2	81	280	0.03	ND	0.00095	0.00033
Isopropylbenzene	98-82-8	NS	NS	NS	ND	0.00095	0.000323
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	ND	0.00095	0.000416
n-Propylbenzene	103-65-1	NS	NS	NS	ND	0.00095	0.000264
1,3,5-Trimethylbenzene	108-67-8	NS	NS	NS	ND	0.00095	0.000429
tert-Butylbenzene	98-06-6	NS	NS	NS	ND	0.00095	0.000303
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	ND	0.00095	0.000491
sec-Butylbenzene	135-98-8	NS	NS	NS	ND	0.00095	0.000315
1,3-Dichlorobenzene	541-73-1	5300	59000	19	ND	0.00095	0.00028
4-Isopropyltoluene	99-87-6	NS	NS	NS	ND	0.00095	0.000365
1,4-Dichlorobenzene	106-46-7	5	13	2	ND	0.00095	0.00028
n-Butylbenzene	104-51-8	NS	NS	NS	ND	0.00095	0.000392
1,2-Dichlorobenzene	95-50-1	5300	59000	17	ND	0.00095	0.000264
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.2	0.005	ND	0.00095	0.000524
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	ND	0.00095	0.000372
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	ND	0.00095	0.000375
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	ND	0.00095	0.00042
Methyl acetate	79-20-9	78000	NS	22	ND	0.0019	0.000292
Cyclohexane	110-82-7	NS	NS	NS	ND	0.00095	0.000432
Methylcyclohexane	108-87-2	NS	NS	NS	ND	0.00095	0.000276
1,3-Dichloropropene (cis- and trans-)	542-75-6	2	7	0.005	ND	0.00095	0.000246
TOTAL TIC's:		NS	NS	NS	ND		NA





1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	NS	NS	0.023	0.023
2,3,4,6-Tetrachlorophenol	58-90-2	NS	NS	NS	NS	0.032	0.028
4,6-Dinitro-2-methylphenol	534-52-1	6	68	0.3	NS	0.032	0.031
N-Nitrosodiphenylamine	86-30-6	99	390	0.4	NS	0.032	0.031
1,2-Diphenylhydrazine	122-66-7	0.7	2	0.7	NS	0.032	0.032
4-Bromophenyl phenyl ether	101-55-3	NS	NS	NS	NS	0.032	0.023
Hexachlorobenzene	118-74-1	0.3	1	0.2	NS	0.032	0.023
Atrazine	1912-24-9	210	2400	0.2	NS	0.032	0.025
Pentachlorophenol	87-86-5	0.9	3	0.3	NS	0.032	0.022
Phenanthrene	85-01-8	NS	300000	NS	NS	0.032	0.031
Anthracene	120-12-7	17000	30000	2400	NS	0.032	0.032
Carbazole	86-74-8	24	96	NS	NS	0.032	0.029
Di-n-butyl phthalate	84-74-2	6100	68000	760	NS	0.032	0.027
Fluoranthene	206-44-0	2300	24000	1300	NS	0.032	0.031
Benzidine	92-87-5	0.7	0.7	0.7	NS	0.032	0.025
Pyrene	129-00-0	1700	18000	840	NS	0.032	0.029
Butyl benzyl phthalate	85-68-7	1200	14000	230	NS	0.032	0.030
3,3'-Dichlorobenzidine	91-94-1	1	4	0.2	NS	0.032	0.029
Benzo[a]anthracene	56-55-3	5	17	0.8	NS	0.032	0.019
Chrysene	218-01-9	450	1700	80	NS	0.032	0.030
Bis(2-ethylhexyl) phthalate	117-81-7	35	140	1200	NS	0.032	0.029
Di-n-octyl phthalate	117-84-0	2400	27000	3300	NS	0.032	0.030
Benzo[b]fluoranthene	205-99-2	5	17	2	NS	0.032	0.031
Benzo[k]fluoranthene	207-08-9	45	170	25	NS	0.032	0.027
Benzo[a]pyrene	50-32-8	0.5	2	0.2	NS	0.032	0.028
Indeno[1,2,3-cd]pyrene	193-39-5	5	17	7	NS	0.032	0.031
Dibenz[a,h]anthracene	53-70-3	0.5	2	0.8	NS	0.032	0.030
Benzo[g,h,i]perylene	191-24-2	380000	30000	NS	NS	0.032	0.031
Dinitrotoluene (2,4- and 2,6-)	25321-14-6	0.7	3	0.2	NS	0.032	0.031
TOTAL TIC's:		NS	NS	NS	NS	0.032	NA

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PCB's (mg/kg)						Conc	Q	RL	MDL
Aroclor-1016	12674-11-2	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1221	11104-28-2	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1232	11141-16-5	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1242	53469-21-9	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1248	12672-29-6	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1254	11097-69-1	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1260	11096-82-5	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1262	37324-23-5	NS	NS	NS	NS	ND		0.00329	0.00132
Aroclor-1268	11100-14-4	NS	NS	NS	NS	ND		0.00329	0.00132
PCBs	1336-36-3	0.2	1	0.2	0.2	ND		0.00329	0.00132

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Pesticides (mg/Kg)									Conc	Q	RL	MDL
alpha-BHC	319-84-6	0.1	0.5	0.002	ND	0.000658	0.000329					
beta-BHC	319-85-7	0.4	2	0.002	ND	0.000658	0.000329					
gamma-BHC (Lindane)	58-89-9	0.4	2	0.002	ND	0.000658	0.000329					
delta-BHC	319-86-8	NS	NS	NS	ND	0.000658	0.000329					
Heptachlor	76-44-8	0.1	0.7	0.5	ND	0.000658	0.000329					
Aldrin	309-00-2	0.04	0.2	0.2	ND	0.000658	0.000329					
Heptachlor epoxide	1024-57-3	0.07	0.3	0.01	ND	0.000658	0.000329					
Endosulfan I	959-98-8	NS	NS	NS	ND	0.000658	0.000329					
4,4'-DDE	72-55-9	2	9	18	ND	0.000658	0.000329					
Dieldrin	60-57-1	0.04	0.2	0.003	ND	0.000658	0.000329					
Endrin	72-20-8	23	340	1	ND	0.000658	0.000329					
Endosulfan II	33213-65-9	NS	NS	NS	ND	0.000658	0.000329					
4,4'-DDD	72-54-8	3	13	4	ND	0.000658	0.000329					
Endrin aldehyde	7421-93-4	NS	NS	NS	ND	0.000658	0.000329					
Endosulfan sulfate	1031-07-8	470	6800	2	ND	0.000658	0.000329					
4,4'-DDT	50-29-3	2	8	11	ND	0.000658	0.000329					
Endrin ketone	53494-70-5	NS	NS	NS	ND	0.000658	0.000329					
Methoxychlor	72-43-5	390	5700	160	ND	0.000658	0.000329					
alpha-Chlordane	5103-71-9	NS	NS	NS	ND	0.000658	0.000329					
gamma-Chlordane	5103-74-2	NS	NS	NS	ND	0.000658	0.000329					
Toxaphene	8001-35-2	0.6	3	0.3	ND	0.00823	0.00395					
Endosulfan (I and II)	115-29-7	470	6800	4	ND	0.000658	0.000329					
Chlordane (alpha and gamma)	57-74-9	0.2	1	0.05	ND	0.000658	0.000329					

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NJ-EPH-C40 (mg/Kg) C9-C40	IALC9C40	NS	NS	NS	Conc 21.1	Q J	RL 49.9	MDL 19.9

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Metals (mg/Kg)								Conc	Q	RL	MDL
Aluminum	7429-90-5	78000	NS	6000	4640	5.43	2.17				
Antimony	7440-36-0	31	450	6	ND	0.543	0.217				
Arsenic	7440-38-2	19	19	19	0.687	0.543	0.163				
Barium	7440-39-3	16000	59000	2100	41.1	0.543	0.272				
Beryllium	7440-41-7	16	140	0.7	0.316	J	0.163				
Cadmium	7440-43-9	78	78	2	ND	0.543	0.326				
Calcium	7440-70-2	NS	NS	NS	3920	54.3	16.3				
Chromium	7440-47-3	NS	NS	NS	16.3	0.543	0.272				
Cobalt	7440-48-4	1600	590	90	8.86	0.543	0.163				
Copper	7440-50-8	3100	45000	11000	50.4	0.543	0.380				
Iron	7439-89-6	NS	NS	NS	13500	54.3	16.3				
Lead	7439-92-1	400	800	90	3.21	0.543	0.272				
Magnesium	7439-95-4	NS	NS	NS	4030	54.3	16.3				
Manganese	7439-96-5	11000	5900	65	94.9	0.543	0.380				
Mercury	7439-97-6	23	65	0.1	ND	0.031	0.013				
Nickel	7440-02-0	1600	23000	48	23.0	0.543	0.380				
Potassium	7440-09-7	NS	NS	NS	3050	54.3	21.7				
Selenium	7782-49-2	390	5700	11	3.37	J	1.63				
Silver	7440-22-4	390	5700	1	ND	0.543	0.326				
Sodium	7440-23-5	NS	NS	NS	116	54.3	21.7				
Thallium	7440-28-0	withdrawn	withdrawn	3	ND	0.543	0.272				
Vanadium	7440-62-2	78	1100	NS	23.6	0.543	0.272				
Zinc	7440-66-6	23000	110000	930	19.4	5.43	1.09				

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General Analytical		18540-29-9	240	20	NS	Conc	Q	RL	MDL
Hexavalent Chromium-mg/Kg		SRP 6	NS	NS	NS	ND		1.00	0.380
pH/Corrosivity-SU		16065-83-1	120000	NS	NS	8.38		NA	NA
Trivalent (III) Chromium-mg/Kg						16.3		1.00	0.380

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Subcontracted Data	NS	NS	NS	Conc	Q	RL	MDL
NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017				?		?	NA
<b>BOLD Conc</b>							
<b>BOLD RL</b>							
<b>BOLD MDL</b>							
NS = No Standard Available							
~ = Sample not analyzed for							
ND = Analyzed for but Not Detected at the MDL							
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.							
? = Results not available							
Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section							