ENVIRONMENTAL SERVICE LABORATORIES, INC.

1803 Philadelphia Street
Indiana, PA 15701
P: (724) 463-8378
F: (724) 465-4209
PADEP: 32-00382

1276 Bentleyville Road
Van Voorhis, PA 15366
P: (724) 258-8378
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950 West Main Street
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P: (724) 463-8378 x 500
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PADEP: 43-04934

07 January 2020

MSANK
Attn: Joseph F. Ditty
120 Logans Ferry Rd
New Kensington, PA 15068

Work Order: 9121510
Project: MSANK Total Toxic Pollutants

Report of Analysis

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received	Sample Notes
Sludge	9121510-01	Sludge	12/18/2019 10:28	12/18/19 16:40	

Report Narrative

The results contained in this report are only representative of the samples received. Environmental Service Laboratories, Inc. is not responsible for use or interpretation of the data included herein.

2,3,7,8-Tetrachlorodibenzo-p-dioxin not present in EPA 625 library search for sample (w.o. #9121510-01).

PCB and Pesticides subcontracted to Pace Analytical Services, LLC., PA-DEP ID 65-00282; please see attached subcontract laboratory Report of Analysis for results.

Definitions

Qq	Matrix Spike Duplicate analysis did not meet laboratory acceptance criteria.
LH	Laboratory control sample exceeded acceptance criteria, result may be biased high.
RL	Reporting Limit

Certifications

Analyses performed by Environmental Service Laboratories, Inc., Indiana PA unless otherwise specified.

Environmental Service Laboratories, Inc., Indiana, PA/TNI Certification #32-00382

Approved By

Amanda Penatzer

Amanda Penatzer
Project Manager

NELAP ACCREDITED TNI LABORATORY

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MSANK
120 Logans Ferry Rd
New Kensington, PA 15068

Reported: 01/07/2020 10:30

Lab Sample ID#: 9121510-01
Sample Type: Sludge
Sample Source: Grab
Sampler: Client
Client Sample ID: Sludge

Sample Date: 12/18/2019 10:28
Receipt Date: 12/18/2019 16:40

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
General Chemistry	**Analytical Method: SM2540G**			**Prep Method: Metals No Prep**			
% Solids	19.9	%			BJL	12/26/19 19:56	12/26/19 19:56
Total Metals	**Analytical Method: EPA6010**			**Prep Method: EPA 3050 B**			
Antimony	<9.99	mg/kg dry		9.99	BJL	12/20/19 15:48	12/23/19 15:17
Beryllium	<2.50	mg/kg dry		2.50	BJL	12/20/19 15:48	12/23/19 15:17
Thallium	<4.99	mg/kg dry		4.99	BJL	12/20/19 15:48	12/23/19 15:17
Volatile Organics	**Analytical Method: EPA8260**			**Prep Method: Purge and Trap**			
Dichlorodifluoromethane	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
Chloromethane	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
Vinyl chloride	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
Bromomethane	<4120	ug/kg dry	LH	4120	MJK	12/31/19 13:53	12/31/19 13:53
Chloroethane	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
Trichlorofluoromethane	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
1,1-Dichloroethene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Acetone	8980	ug/kg dry		8240	MJK	12/31/19 13:53	12/31/19 13:53
Methylene Chloride	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Methyl-tert-butyl ether	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
trans-1,2-Dichloroethene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,1-Dichloroethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
2-Butanone	<8240	ug/kg dry		8240	MJK	12/31/19 13:53	12/31/19 13:53
cis-1,2-Dichloroethene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Chloroform	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Bromochloromethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,1,1-Trichloroethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,1-Dichloropropene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Carbon Tetrachloride	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Benzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2-Dichloroethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Trichloroethene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2-Dichloropropane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Dibromomethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Bromodichloromethane	<824	ug/kg dry		824	MJK	12/31/19 13:5	

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Reported: 01/07/2020 10:30

Lab Sample ID#: 9121510-01
Sample Type: Sludge
Sample Source: Grab
Sampler: Client
Client Sample ID: Sludge

Sample Date: 12/18/2019 10:28
Receipt Date: 12/18/2019 16:40

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
cis-1,3-Dichloropropene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
4-Methyl-2-pentanone	<8240	ug/kg dry		8240	MJK	12/31/19 13:53	12/31/19 13:53
Toluene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
trans-1,3-Dichloropropene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2,3-Trichloropropane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,1,2-Trichloroethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,3-Dichloropropane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Tetrachloroethene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
2-Hexanone	<8240	ug/kg dry		8240	MJK	12/31/19 13:53	12/31/19 13:53
Dibromochloromethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2-Dibromoethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Chlorobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,1,1,2-Tetrachloroethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Ethyl Benzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
m,p-Xylenes	<1650	ug/kg dry		1650	MJK	12/31/19 13:53	12/31/19 13:53
o-Xylene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Total Xylenes	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Styrene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Isopropylbenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Bromoform	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,1,2,2-Tetrachloroethane	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
n-Propyl Benzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,3,5-Trimethylbenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Bromobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
2-Chlorotoluene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
4-Chlorotoluene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
tert-Butylbenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2,4-Trimethylbenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
sec-Butylbenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
4-Isopropyltoluene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,3-Dichlorobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Butylbenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,4-Dichlorobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2-Dichlorobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53

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Reported: 01/07/2020 10:30

Lab Sample ID#: 9121510-01
Sample Type: Sludge
Sample Source: Grab
Sampler: Client
Client Sample ID: Sludge

Sample Date: 12/18/2019 10:28
Receipt Date: 12/18/2019 16:40

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
1,2-Dibromo-3-chloropropane	<4120	ug/kg dry		4120	MJK	12/31/19 13:53	12/31/19 13:53
1,2,4-Trichlorobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Hexachlorobutadiene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Naphthalene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
1,2,3-Trichlorobenzene	<824	ug/kg dry		824	MJK	12/31/19 13:53	12/31/19 13:53
Surrogate: 1,2-Dichloroethane-d4	*93.1 %*		*80-120*		*MJK*	*12/31/19 13:53*	*12/31/19 13:53*
Surrogate: Toluene-d8	*98.3 %*		*88-110*		*MJK*	*12/31/19 13:53*	*12/31/19 13:53*
Surrogate: 4-Bromofluorobenzene	*93.2 %*		*86-115*		*MJK*	*12/31/19 13:53*	*12/31/19 13:53*

Organics **Analytical Method: EPA8270C** **Prep Method: EPA 3550 B**

Pyridine	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
N-Nitrosodimethylamine	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Aniline	<4990	ug/kg dry	Qq	4990	MJK	12/30/19 13:39	12/31/19 18:06
Phenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
bis(2-chloroethyl)ether	<4990	ug/kg dry	Qq	4990	MJK	12/30/19 13:39	12/31/19 18:06
2-Chlorophenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
1,3-Dichlorobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
1,4-Dichlorobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzyl alcohol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
1,2-Dichlorobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2-Methylphenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
bis(2-chloroisopropyl)ether	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
3 & 4-Methylphenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
N-Nitroso-di-n-propylamine	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Hexachloroethane	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Nitrobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Isophorone	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2-Nitrophenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,4-Dimethylphenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
bis(2-chloroethoxy)methane	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,4-Dichlorophenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzoic acid	<9940	ug/kg dry	Qq	9940	MJK	12/30/19 13:39	12/31/19 18:06
1,2,4-Trichlorobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Naphthalene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
4-Chloroaniline	<4990	ug/kg dry	Qq	4990	MJK	12/30/19 13:3	

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Reported: 01/07/2020 10:30

Lab Sample ID#: 9121510-01
Sample Type: Sludge
Sample Source: Grab
Sampler: Client
Client Sample ID: Sludge

Sample Date: 12/18/2019 10:28
Receipt Date: 12/18/2019 16:40

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
Hexachlorobutadiene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
4-Chloro-3-methylphenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2-Methylnaphthalene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Hexachlorocyclopentadiene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,4,6-Trichlorophenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,4,5-Trichlorophenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2-Chloronaphthalene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2-Nitroaniline	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Dimethylphthalate	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Acenaphthylene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,6-Dinitrotoluene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
3-Nitroaniline	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Acenaphthene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,4-Dinitrophenol	<9940	ug/kg dry		9940	MJK	12/30/19 13:39	12/31/19 18:06
4-Nitrophenol	<9940	ug/kg dry		9940	MJK	12/30/19 13:39	12/31/19 18:06
Dibenzofuran	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
2,4-Dinitrotoluene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Diethylphthalate	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Fluorene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
4-Chlorophenyl-phenylether	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
4-Nitroaniline	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
4,6-Dinitro-2-methylphenol	<9940	ug/kg dry		9940	MJK	12/30/19 13:39	12/31/19 18:06
N-Nitrosodiphenylamine	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Azobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
4-Bromophenyl-phenylether	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Hexachlorobenzene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Pentachlorophenol	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Phenanthrene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Anthracene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Carbazole	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Di-n-butyl phthalate	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Fluoranthene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzidine	<14900	ug/kg dry		14900	MJK	12/30/19 13:39	12/31/19 18:06
Pyrene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06

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Sample Type: Sludge
Sample Source: Grab
Sampler: Client
Client Sample ID: Sludge

Sample Date: 12/18/2019 10:28
Receipt Date: 12/18/2019 16:40

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
Butylbenzylphthalate	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzo[a]anthracene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
3,3'-Dichlorobenzidine	<9940	ug/kg dry		9940	MJK	12/30/19 13:39	12/31/19 18:06
Chrysene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
bis(2-ethylhexyl)phthalate	26800	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Di-n-octyl phthalate	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzo[b]fluoranthene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzo[k]fluoranthene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzo[a]pyrene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Indeno(1,2,3-cd)pyrene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Dibenzo(a,h)anthracene	<4990	ug/kg dry	Qq	4990	MJK	12/30/19 13:39	12/31/19 18:06
Benzo[ghi]perylene	<4990	ug/kg dry		4990	MJK	12/30/19 13:39	12/31/19 18:06
Surrogate: 2-Fluorophenol	*73 %*		*20-150*		*MJK*	*12/30/19 13:39*	*12/31/19 18:06*
Surrogate: Phenol-d6	*74 %*		*20-150*		*MJK*	*12/30/19 13:39*	*12/31/19 18:06*
Surrogate: Nitrobenzene-d5	*68 %*		*30-150*		*MJK*	*12/30/19 13:39*	*12/31/19 18:06*
Surrogate: 2-Fluorobiphenyl	*81 %*		*30-150*		*MJK*	*12/30/19 13:39*	*12/31/19 18:06*
Surrogate: 2,4,6-Tribromophenol	*90 %*		*20-150*		*MJK*	*12/30/19 13:39*	*12/31/19 18:06*
Surrogate: p-Terphenyl-d14	*97 %*		*30-150*		*MJK*	*12/30/19 13:39*	*12/31/19 18:06*
No TICs Found	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Dodecane, 1-iodo-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Dodecane	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Cyclopentasiloxane, decamethyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Carbonic acid, prop-1-en-2-yl tetradecyl ester	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Dodecane, 3-methyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Dodecane, 2,6,11-trimethyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Tridecane	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Undecane, 3-methyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Undecane, 2-methyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Tridecane, 6-methyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Tridecane, 4-methyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Tridecane, 2-methyl- (01)	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Tentatively Identified Compounds	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Pentadecane, 7-methyl-	0.00	ug/kg dry			MJK	12/30/19 13:3	

ENVIRONMENTAL SERVICE LABORATORIES, INC.

1803 Philadelphia Street
Indiana, PA 15701
P: (724) 463-8378
F: (724) 465-4209
PADEP: 32-00382

1276 Bentleyville Road
Van Voorhis, PA 15366
P: (724) 258-8378
F: (724) 258-8376
PADEP: 63-04247

435 Broad Street
Montoursville, PA 17754
P: (570) 321-9002
F: (570) 321-1957
PADEP: 41-04880

950 West Main Street
Sharpsville, PA 16150
P: (724) 463-8378 x 500
F: (724) 465-4209
PADEP: 43-04934

MSANK
120 Logans Ferry Rd
New Kensington, PA 15068

Reported: 01/07/2020 10:30

Lab Sample ID#: 9121510-01
Sample Type: Sludge
Sample Source: Grab
Sampler: Client
Client Sample ID: Sludge

Sample Date: 12/18/2019 10:28
Receipt Date: 12/18/2019 16:40

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
TIC: Pentadecane	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: n-Hexadecanoic acid	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Hexadecane	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Heneicosane	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Tridecane, 2-methyl- (02)	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06
TIC: Dodecane, 2,7,10-trimethyl-	0.00	ug/kg dry			MJK	12/30/19 13:39	12/31/19 18:06

ENVIRONMENTAL SERVICE LABORATORIES, INC.

1803 Philadelphia St.
Indiana, PA 15701
P: 724-463-TEST
F: 724-465-4209

1276 Bentleyville Rd.
Van Voorhis, PA 15366
P: 724-258-TEST
F: 724-258-8376

1200 River Avenue
Willia
P: 5
F: 5

9121510

SAMPLE REQUEST & CHAIN OF CUSTODY

PAGE 2 OF 2

Sample Identification	ESL#	Sample Type: Composite Date on/off	Composite Time on/off	Grab Date	Grab Time	Matrix	# of Bottles	Container Type / Preservative	Analysis Requested
	9121510								
Sludge	01			12-18-19	10:28	S	3 ✓	Glass Liter / None	VOCs, SVOCs + Dioxin Screen, Pesticides, PCBs, Total Solids, Sb, Be, Tl

THE UNDERSIGNED PURCHASER HEREBY AGREES TO PAY SERVICE CHARGES ON ACCOUNTS OVER 31 DAYS OLD.
1. THESE SERVICE CHARGES WILL ACCRUE AT THE RATE OF 1 1/2% PER MONTH (18% PER ANNUM OR THE MAXIMUM ALLOWED BY LAW.)
2. THE UNDERSIGNED PURCHASER AGREES TO PAY, IN THE EVENT HIS ACCOUNT BECOMES DELINQUENT AND IS TURNED OVER TO ANY ATTORNEY FOR COLLECTION, REASONABLE ATTORNEY'S FEES PLUS ALL COURT AND ATTENDANT COLLECTION COSTS.

Project Name/Notes/Special Instructions::
MSANK Total Toxic Pollutants

Sampled By: (Signature) Keith A. Anderson Date/ Time 12/18/19
Relinquished By: (Signature) Keith A. Anderson Date/ Time 12/18/19 11:00
Received By: (Signature) Date/ Time 12/18/19 11:00
Relinquished By: (Signature) 12/18/19 1540 Date/ Time
Received By: (Signature) MSANK 15:40 Date/ Time
Relinquished By: (Signature) Date/ Time
Received By: (Signature) Date/ Time

LAB USE ONLY

Correct Preservations Y / N / NA Correct Containers Y / N / NA Receipt Temperature _____

Company/Name: MSANK
Address: 120 Logans Ferry Road
New Kensington, PA 15088
Contact Person: Joseph Ditty
Phone Number: 724-323-9813
Fax Number: 724-335-8289
Email Address: jditty@msank.org
Billing Address:
Purchase Order:

ENVIRONMENTAL SERVICE LABORATORIES, INC.

SAMPLE RECEIPT AND REVIEW FORM

PART A: General Information

9121510

Client: M SANK	**Work O**	
Received by: JHD	**Date/Time Received:** 12/18/19 16:40	**Date Sampled:** 12/18/19
Method of Delivery: FedEx UPS Client Drop off ESL courier Other: _____		
Sample Receipt Temp: 4.4 **IR Gun # Used:** 1 2 3 4	**Samples Received on Ice:** YES NO	
Samples Removed by Satellite Lab Division: Southern(BV) NorthWest(NW) Northern(WP)	**Containers removed by Satellite Lab for analysis of:** TCMPN ECMPN Fecal Coliform TC/EC	
Sample State of Collection: PA NY OH WV Other:_____	**PWSID COMPLIANCE DRINKING WATER SAMPLES:** YES NO	

PART B: Receipt Details

Completed (if different from above): _____ / / _____
Signature Date Time

	Sample Receipt Criteria		Comments/Qualifiers (Required for Non-Conforming Items)	Deficiency Log Required
1	Chain of custody documents included with samples?	Yes No N/A	Comments:	YES NO
2	COC form is properly signed in relinquished/received sections?	Yes No N/A	Comments:	YES NO
3	Sample containers intact and sealed?	Yes No N/A	Circle Applicable: Damaged container Leaking container Custody Seal Broken Other:_____	YES NO
4	Number of containers received match number indicated on COC?	Yes No N/A	Sample ID's affected:	YES NO
5	Sample ID's on COC match ID's on bottles?	Yes No N/A	Sample ID's and containers affected:	YES NO
6	Date and time on COC match date and time on bottles?	Yes No N/A	Sample ID's affected:	YES NO
7	Samples received within holding time?	Yes No N/A	ID's and tests affected:	YES NO
8	Samples received at appropriate pH for analysis requested?	Yes No N/A	Sample ID's, containers affected and observed pH:	YES NO
9	Samples requiring thermal preservation within 0 ≤ 6°C? Microbiology within 0 ≤ 10°C?	Yes No N/A	For non-WV samples outside of thermal preservation range sampled same day and received on ice are considered acceptable condition as the cooling process has begun.	YES NO
11	Adequate sample volume received?	Yes No N/A	Analyses Affected:	YES NO
10	VOA vials free of headspace (defined as < 6mm bubble)?	Yes No N/A	Sample ID's and containers affected:	YES NO

Other Comments:
TTP Sludge

Deficiency Log Created: Yes No

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

January 06, 2020

Mr Richard Rodriguez
Environmental Service Laboratories, Inc.
1803 Philadelphia Street
Indiana, PA 15701

RE: Project: 9121510
Pace Project No.: 30341982

Dear Mr Rodriguez:
Enclosed are the analytical results for sample(s) received by the laboratory on December 20, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Megan A Rager

Megan A. Rager
megan.rager@pacelabs.com
(724)850-5600
Project Manager

Enclosures

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 9121510
Pace Project No.: 30341982

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: 9121510
Pace Project No.: 30341982

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30341982001	**9121510-01**	EPA 8081B	TAW	23	PASI-PA
		EPA 8082A	CWB	10	PASI-PA
		ASTM D2974-87	VAK	1	PASI-PA

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ANALYTICAL RESULTS

Project: 9121510
Pace Project No.: 30341982

Sample: 9121510-01 **Lab ID: 30341982001** Collected: 12/18/19 10:28 Received: 12/20/19 17:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081B GCS Pesticides	Analytical Method: EPA 8081B Preparation Method: EPA 3546							
Aldrin	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	309-00-2	P1
alpha-BHC	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	319-84-6	CH,ML, P1
beta-BHC	**219**	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	319-85-7	C2,ML, P1
delta-BHC	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	319-86-8	CH,P1
gamma-BHC (Lindane)	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	58-89-9	P1
alpha-Chlordane	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	5103-71-9	ML,P1, R1
gamma-Chlordane	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	5103-74-2	P1
4,4'-DDD	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	72-54-8	ML,P1
4,4'-DDE	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	72-55-9	ML,P1
4,4'-DDT	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	50-29-3	P1
Dieldrin	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	60-57-1	P1
Endosulfan I	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	959-98-8	ML,P1
Endosulfan II	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	33213-65-9	P1
Endosulfan sulfate	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	1031-07-8	ML,P1
Endrin	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	72-20-8	P1
Endrin aldehyde	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	7421-93-4	P1
Endrin ketone	ND	ug/kg	230	5	12/31/19 08:12	01/02/20 14:32	53494-70-5	ML,P1
Heptachlor	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	76-44-8	ML,P1
Heptachlor epoxide	ND	ug/kg	115	5	12/31/19 08:12	01/02/20 14:32	1024-57-3	ML,P1
Methoxychlor	ND	ug/kg	1150	5	12/31/19 08:12	01/02/20 14:32	72-43-5	ML,P1
Toxaphene	ND	ug/kg	1150	5	12/31/19 08:12	01/02/20 14:32	8001-35-2	P1
Surrogates								
Tetrachloro-m-xylene (S)	61	%.	50-117	5	12/31/19 08:12	01/02/20 14:32	877-09-8	
Decachlorobiphenyl (S)	61	%.	46-111	5	12/31/19 08:12	01/02/20 14:32	2051-24-3	
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA 3546							
PCB-1016 (Aroclor 1016)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	12674-11-2	ED,P1
PCB-1221 (Aroclor 1221)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	11104-28-2	ED,P1
PCB-1232 (Aroclor 1232)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	11141-16-5	ED,P1
PCB-1242 (Aroclor 1242)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	53469-21-9	ED,P1
PCB-1248 (Aroclor 1248)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	12672-29-6	ED,P1
PCB-1254 (Aroclor 1254)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	11097-69-1	ED,P1
PCB-1260 (Aroclor 1260)	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	11096-82-5	ED,P1
PCB, Total	ND	ug/kg	2450	10	12/26/19 21:31	01/02/20 19:52	1336-36-3	P1
Surrogates								
Tetrachloro-m-xylene (S)	87	%.	34-114	10	12/26/19 21:31	01/02/20 19:52	877-09-8	
Decachlorobiphenyl (S)	106	%.	38-139	10	12/26/19 21:31	01/02/20 19:52	2051-24-3	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**80.0**	%	0.10	1		12/30/19 12:06		

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 9121510
Pace Project No.: 30341982

QC Batch: 377577 | Analysis Method: EPA 8081B
QC Batch Method: EPA 3546 | Analysis Description: 8081 GCS Pesticides
Associated Lab Samples: 30341982001

METHOD BLANK: 1831178 | Matrix: Solid
Associated Lab Samples: 30341982001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/kg	ND	3.3	01/02/20 14:13	
4,4'-DDE	ug/kg	ND	3.3	01/02/20 14:13	
4,4'-DDT	ug/kg	ND	3.3	01/02/20 14:13	
Aldrin	ug/kg	ND	1.6	01/02/20 14:13	
alpha-BHC	ug/kg	ND	1.6	01/02/20 14:13	
alpha-Chlordane	ug/kg	ND	1.6	01/02/20 14:13	
beta-BHC	ug/kg	ND	1.6	01/02/20 14:13	
delta-BHC	ug/kg	ND	1.6	01/02/20 14:13	CH
Dieldrin	ug/kg	ND	3.3	01/02/20 14:13	
Endosulfan I	ug/kg	ND	1.6	01/02/20 14:13	
Endosulfan II	ug/kg	ND	3.3	01/02/20 14:13	
Endosulfan sulfate	ug/kg	ND	3.3	01/02/20 14:13	
Endrin	ug/kg	ND	3.3	01/02/20 14:13	
Endrin aldehyde	ug/kg	ND	3.3	01/02/20 14:13	
Endrin ketone	ug/kg	ND	3.3	01/02/20 14:13	
gamma-BHC (Lindane)	ug/kg	ND	1.6	01/02/20 14:13	
gamma-Chlordane	ug/kg	ND	1.6	01/02/20 14:13	
Heptachlor	ug/kg	ND	1.6	01/02/20 14:13	
Heptachlor epoxide	ug/kg	ND	1.6	01/02/20 14:13	
Methoxychlor	ug/kg	ND	16.3	01/02/20 14:13	
Toxaphene	ug/kg	ND	16.3	01/02/20 14:13	
Decachlorobiphenyl (S)	%.	78	46-111	01/02/20 14:13	
Tetrachloro-m-xylene (S)	%.	75	50-117	01/02/20 14:13	

LABORATORY CONTROL SAMPLE: 1831179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/kg	26.1	19.3	74	61-108	
4,4'-DDE	ug/kg	26.1	19.1	73	67-106	
4,4'-DDT	ug/kg	26.1	20.1	77	54-111	
Aldrin	ug/kg	13.1	8.9	68	59-99	
alpha-BHC	ug/kg	13.1	9.1	70	51-105	
alpha-Chlordane	ug/kg	13.1	9.6	73	59-102	
beta-BHC	ug/kg	13.1	9.1	69	57-103	
delta-BHC	ug/kg	13.1	10	76	10-147	
Dieldrin	ug/kg	26.1	18.9	72	61-104	
Endosulfan I	ug/kg	13.1	9.3	71	56-101	
Endosulfan II	ug/kg	26.1	19.2	73	60-101	
Endosulfan sulfate	ug/kg	26.1	19.8	76	58-108	
Endrin	ug/kg	26.1	18.9	72	58-105	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 9121510
Pace Project No.: 30341982

LABORATORY CONTROL SAMPLE: 1831179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin aldehyde	ug/kg	26.1	15.0	57	37-113	
Endrin ketone	ug/kg	26.1	18.3	70	59-112	
gamma-BHC (Lindane)	ug/kg	13.1	8.9	68	52-106	
gamma-Chlordane	ug/kg	13.1	9.4	72	58-101	
Heptachlor	ug/kg	13.1	9.0	69	56-101	
Heptachlor epoxide	ug/kg	13.1	9.0	68	60-99	
Methoxychlor	ug/kg	131	97.5	75	60-105	
Decachlorobiphenyl (S)	%.			76	46-111	
Tetrachloro-m-xylene (S)	%.			73	50-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1831180 1831181

Parameter	Units	30341982001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
4,4'-DDD	ug/kg	ND	381	365	153J	201J	40	55	44-117		ML
4,4'-DDE	ug/kg	ND	381	365	245	224J	45	42	49-118		ML
4,4'-DDT	ug/kg	ND	381	365	206J	219J	31	36	11-142		
Aldrin	ug/kg	ND	191	183	149	148	61	62	42-115	1	
alpha-BHC	ug/kg	ND	191	183	79J	102J	36	50	41-117		CH,ML
alpha-Chlordane	ug/kg	ND	191	183	196	144	49	22	45-118	31	ML,R1
beta-BHC	ug/kg	219	191	183	125	119	-50	-55	23-139	4	ML
delta-BHC	ug/kg	ND	191	183	147	140	43	41	10-149	5	CH
Dieldrin	ug/kg	ND	381	365	180J	196J	42	48	33-129		
Endosulfan I	ug/kg	ND	191	183	100J	116	29	40	30-116		ML
Endosulfan II	ug/kg	ND	381	365	206J	200J	54	55	24-118		
Endosulfan sulfate	ug/kg	ND	381	365	210J	240	30	39	36-121		ML
Endrin	ug/kg	ND	381	365	194J	225J	51	61	43-118		
Endrin aldehyde	ug/kg	ND	381	365	154J	144J	40	39	16-110		
Endrin ketone	ug/kg	ND	381	365	280	198J	38	17	40-118		ML
gamma-BHC (Lindane)	ug/kg	ND	191	183	112J	130	54	66	38-120		
gamma-Chlordane	ug/kg	ND	191	183	202	189	54	48	10-134	7	
Heptachlor	ug/kg	ND	191	183	83.4J	98.8J	33	43	45-112		ML
Heptachlor epoxide	ug/kg	ND	191	183	112J	122	10	15	51-109		ML
Methoxychlor	ug/kg	ND	1910	1830	1150J	1180	23	25	40-121		ML
Decachlorobiphenyl (S)	%.						67	69	46-111		
Tetrachloro-m-xylene (S)	%.						62	66	50-117		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 9121510
Pace Project No.: 30341982

QC Batch: 377210 | Analysis Method: EPA 8082A
QC Batch Method: EPA 3546 | Analysis Description: 8082A GCS PCB
Associated Lab Samples: 30341982001

METHOD BLANK: 1829573 | Matrix: Solid
Associated Lab Samples: 30341982001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	16.6	01/02/20 19:35	
PCB-1221 (Aroclor 1221)	ug/kg	ND	16.6	01/02/20 19:35	
PCB-1232 (Aroclor 1232)	ug/kg	ND	16.6	01/02/20 19:35	
PCB-1242 (Aroclor 1242)	ug/kg	ND	16.6	01/02/20 19:35	
PCB-1248 (Aroclor 1248)	ug/kg	ND	16.6	01/02/20 19:35	
PCB-1254 (Aroclor 1254)	ug/kg	ND	16.6	01/02/20 19:35	
PCB-1260 (Aroclor 1260)	ug/kg	ND	16.6	01/02/20 19:35	
Decachlorobiphenyl (S)	%.	85	38-139	01/02/20 19:35	
Tetrachloro-m-xylene (S)	%.	62	34-114	01/02/20 19:35	

LABORATORY CONTROL SAMPLE: 1829574

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	166	105	63	61-105	
PCB-1260 (Aroclor 1260)	ug/kg	166	117	70	70-100	
Decachlorobiphenyl (S)	%.			85	38-139	
Tetrachloro-m-xylene (S)	%.			63	34-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1829575 1829576

Parameter	Units	30342023035 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	185	185	145	149	79	81	24-137	3	
PCB-1260 (Aroclor 1260)	ug/kg	463	185	185	611	638	80	95	19-156	4	
Decachlorobiphenyl (S)	%.						87	86	38-139		
Tetrachloro-m-xylene (S)	%.						69	66	34-114		

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: 9121510
Pace Project No.: 30341982

QC Batch: 377422
QC Batch Method: ASTM D2974-87
Associated Lab Samples: 30341982001

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture

SAMPLE DUPLICATE: 1830639

Parameter	Units	30341578001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	0.19	ND		

SAMPLE DUPLICATE: 1830640

Parameter	Units	30341979001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	79.9	80.2	0	

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 9121510
Pace Project No.: 30341982

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

C2	Relative percent difference between results from each column was greater than 40%. The lower of the two results was reported.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
P1	Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.
R1	RPD value was outside control limits.

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 9121510
Pace Project No.: 30341982

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30341982001	**9121510-01**	EPA 3546	377577	EPA 8081B	377616
30341982001	**9121510-01**	EPA 3546	377210	EPA 8082A	377239
30341982001	**9121510-01**	ASTM D2974-87	377422		

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SUBCONTRACT ORDER

Environmental Service Laboratories, I

9121510

WO# : 30341982

30341982

Please report all results to **reports@envlabs.com**. Contact E... with any questions.

SENDING LABORATORY:

Environmental Service Laboratories, Inc.
1803 Philadelphia Street
Indiana, PA 15701
Phone: 724-463-8378
Fax: 724-465-4209
Project Manager: Amanda Penatzer

RECEIVING LABORATORY:

Pace Analytical Services, LLC.
1638 Roseytown Road - Suites 2, 3, 4
Greensburg, PA 15601
Phone :(724) 850-5600
Fax: -

State of Origin: PA

Analysis	Due	Expires	Comments
Sample ID: 9121510-01			
Matrix: Solid **Sampled: 12/18/2019 10:28**	**Sample Type: Grab**		**Sampled By: Client**
PCB	12/31/2019 23:00	01/01/2020 10:28	
Pesticides	12/31/2019 23:00	01/01/2020 10:28	
Containers Supplied:			
Glass Jar, 32 oz. (C)			

Released By	Date	Received By	Date
[illegible]	12/18/19	Bill Graham	12-20-19 1015
Bill Graham	122019 1730	[illegible]	12/20/19 1730

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: ESL

Project # # 30341982

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Label JSM
LIMS Login JSM

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Thermometer Used 10 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 2.4 °C Correction Factor: 0 °C Final Temp: 2.4 °C

Temp should be above freezing to 6°C

pH paper Lot# ——

Date and initials of person examining contents: JSM 12/20/19

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4. no signature
Sample Labels match COC: -Includes date/time/ID Matrix: SL	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:		✓		
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, (Non-aqueous matrix)			✓	16.
All containers meet method preservation requirements.	✓			Initial when completed JSM / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr			✓	Initial when completed: JSM Date: 12/20/19

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

J:\QAQC\Master\Document Management\Sample Mgt\Sample Condition Upon Receipt Pittsburgh (C056-9 5April2019)