

Analytical Report for

EA Engineering

Certificate of Analysis No.: 10060417

Project Manager: Pete Lekas

Project Name : Gude Landfill

Project Location: Rockville, MD



July 14, 2010

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL
PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047

PHASE SEPARATION SCIENCE, INC.



July 14, 2010

Pete Lekas
EA Engineering
15 Loveton Circle
Sparks, MD 21152

Reference: PSS Work Order No: **10060417**
Project Name : Gude Landfill
Project Location: Rockville, MD

Dear Pete Lekas :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **10060417**.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on July 9, 2010. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Dan Prucnal

Laboratory Manager



Case Narrative Summary

Client Name: EA Engineering

Project Name: Gude Landfill

Project ID: N/A

Work Order Number: 10060417

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/04/2010 at 03:00 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
10060417-001	Gude-MW1A-SO-14 to 18	SOIL	06/03/2010 16:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in the Sample Receipt Checklist.

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Narrative Comments:

Revised Version 1.001 reflects changes to Volatile, Semivolatile, and Herbicides reporting compounds.

Notes:

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
 - C Results Pending Final Confirmation.
 - D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
 - E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
 - Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
 - J The target analyte was positively identified below the reporting limit but greater than one-half of the reporting limit.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
 - RL PSS Reporting Limit.
 - U Not detected.

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

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CERTIFICATE OF ANALYSIS

No: 10060417
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW1A-SO-14 to 18 Date/Time Sampled: 06/03/2010 16:00 PSS Sample ID: 10060417-001
 Matrix: SOIL Date/Time Received: 06/04/2010 15:00 % Solids: 85

Total Metals

Analytical Method: SW846 6020A

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Arsenic	2.5	mg/kg	0.5		1	06/14/10	06/16/10 15:33	1033
Barium	19	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Beryllium	ND	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Cadmium	ND	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Chromium	30	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Cobalt	11	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Copper	22	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Lead	7.4	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Mercury	ND	mg/kg	0.11		1	06/14/10	06/16/10 15:33	1033
Nickel	15	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Selenium	ND	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Silver	ND	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Thallium	ND	mg/kg	2.1		1	06/14/10	06/16/10 15:33	1033
Tin	ND	mg/kg	5.3		1	06/14/10	06/16/10 15:33	1033
Vanadium	22	mg/kg	2.6		1	06/14/10	06/16/10 15:33	1033
Zinc	22	mg/kg	11		1	06/14/10	06/16/10 15:33	1033

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Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
gamma-BHC (Lindane)	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
beta-BHC	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
delta-BHC	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Heptachlor	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Aldrin	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Heptachlor epoxide	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
gamma-Chlordane	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
alpha-Chlordane	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
4,4-DDE	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Endosulfan I	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Dieldrin	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Endrin	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
4,4-DDD	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Endosulfan II	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
4,4-DDT	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Endrin aldehyde	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Methoxychlor	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Endosulfan sulfate	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Endrin ketone	ND	ug/kg	23		1	06/16/10	06/16/10 21:38	1029
Toxaphene	ND	ug/kg	230		1	06/16/10	06/16/10 21:38	1029
Chlordane	ND	ug/kg	230		1	06/16/10	06/16/10 21:38	1029

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No: 10060417
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW1A-SO-14 to 18 **Date/Time Sampled: 06/03/2010 16:00** **PSS Sample ID: 10060417-001**
Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

Clean up Method: SW846 3665A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029
PCB-1221	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029
PCB-1232	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029
PCB-1242	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029
PCB-1248	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029
PCB-1254	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029
PCB-1260	ND	mg/kg	0.1		1	06/16/10	06/17/10 10:13	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	230		1	120	06/17/10	06/17/10 17:50	1029
2,4,5-TP (Silvex)	ND	ug/kg	23		1	12	06/17/10	06/17/10 17:50	1029
2,4,5-T	ND	ug/kg	23		1	12	06/17/10	06/17/10 17:50	1029
Dinoseb	ND	ug/kg	120		1	58	06/17/10	06/17/10 17:50	1029

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Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

TCL Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Chloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Vinyl Chloride	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Bromomethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Chloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Acetone	77	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Methylene chloride	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Vinyl acetate	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
2-Butanone (MEK)	ND	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Bromochloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Chloroform	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Benzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Dibromomethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Carbon Disulfide	ND	ug/kg	11		1	5.4	06/11/10	06/11/10 15:28	1035
Trichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Acrylonitrile	ND	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035
Bromodichloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035

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 410-747-8770
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CERTIFICATE OF ANALYSIS

No: 10060417

EA Engineering, Sparks, MD

July 14, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW1A-SO-14 to 18 **Date/Time Sampled: 06/03/2010 16:00** **PSS Sample ID: 10060417-001**
Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

TCL Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Toluene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
2-Hexanone (MBK)	ND	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Dibromochloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Acrolein	ND	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Bromoform	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Tetrachloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Chlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Ethylbenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
m&p-Xylene	ND	ug/kg	11		1	5.4	06/11/10	06/11/10 15:28	1035
Styrene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
o-Xylene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	44		1	22	06/11/10	06/11/10 15:28	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Iodomethane	ND	ug/kg	22		1	11	06/11/10	06/11/10 15:28	1035
Naphthalene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 15:28	1035
Octanal (TIC)	9	ug/kg	11		1	5.4	06/11/10	06/11/10 15:28	1035
Hexanal (TIC)	15	ug/kg	11		1	5.4	06/11/10	06/11/10 15:28	1035
Pentanal (TIC)	6	ug/kg	11		1	5.4	06/11/10	06/11/10 15:28	1035

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REVISED

Sample ID: Gude-MW1A-SO-14 to 18 **Date/Time Sampled: 06/03/2010 16:00** **PSS Sample ID: 10060417-001**
Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

TCL Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Heptanal (TIC)	9	ug/kg	11		1	5.4	06/11/10	06/11/10 15:28	1035

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Sample ID: Gude-MW1A-SO-14 to 18 **Date/Time Sampled: 06/03/2010 16:00** **PSS Sample ID: 10060417-001**
Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

TCL Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Acenaphthylene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Acetophenone	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Anthracene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Benzo(a)anthracene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Benzo(a)pyrene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Benzo(b)fluoranthene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Benzo(g,h,i)perylene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Benzo(k)fluoranthene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Benzyl butyl phthalate	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
bis(2-chloroethyl) ether	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
4-Bromophenylphenyl ether	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Di-n-butyl phthalate	ND	ug/kg	390		1	200	06/15/10	06/15/10 21:23	1040
4-Chloro-3-methylphenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
4-Chloroaniline	ND	ug/kg	390		1	200	06/15/10	06/15/10 21:23	1040
2-Chloronaphthalene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2-Chlorophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Chrysene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Dibenz(a,h)anthracene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Dibenzofuran	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
3,3-Dichlorobenzidine	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2,4-Dichlorophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Diethyl phthalate	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Dimethyl phthalate	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2,4-Dimethylphenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
4,6-dinitro-2-methyl phenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10060417

EA Engineering, Sparks, MD

July 14, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW1A-SO-14 to 18 **Date/Time Sampled: 06/03/2010 16:00** **PSS Sample ID: 10060417-001**
Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

TCL Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	390		1	200	06/15/10	06/15/10 21:23	1040
2,4-Dinitrotoluene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2,6-Dinitrotoluene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Fluoranthene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Fluorene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Hexachlorobenzene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Hexachlorobutadiene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Hexachlorocyclopentadiene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Hexachloroethane	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Isophorone	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2-Methylnaphthalene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2-Methylphenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
3&4-Methylphenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
4-Nitroaniline	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
3-Nitroaniline	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2-Nitroaniline	ND	ug/kg	390		1	200	06/15/10	06/15/10 21:23	1040
Nitrobenzene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2-Nitrophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
4-Nitrophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
N-Nitrosodimethylamine	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
N-Nitrosodiphenylamine	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Di-n-octyl phthalate	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Pentachlorophenol	ND	ug/kg	390		1	200	06/15/10	06/15/10 21:23	1040
Phenanthrene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Phenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Pyrene	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040

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 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
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 410-747-8770
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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10060417
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW1A-SO-14 to 18 **Date/Time Sampled: 06/03/2010 16:00** **PSS Sample ID: 10060417-001**
Matrix: SOIL **Date/Time Received: 06/04/2010 15:00** **% Solids: 85**

TCL Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
2,4,5-Trichlorophenol	ND	ug/kg	200		1	98	06/15/10	06/15/10 21:23	1040
Erucylamide (TIC)	620	ug/kg	160		1	98	06/15/10	06/15/10 21:23	1040
9-Octadecenamide, (Z)- (TIC)	760	ug/kg	160		1	98	06/15/10	06/15/10 21:23	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	2.9		1	06/15/10	06/15/10 00:00	1022



Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number	10060417	Received By	Rachel Davis
Client Name	EA Engineering	Date Received	06/04/2010 03:00:00 PM
Project Name	Gude Landfill	Delivered By	Client
Project Number	N/A	Tracking No	Not Applicable
Disposal Date:	07/09/2010	Logged In By	Rachel Davis

Shipping Container(s)

No of Coolers	1	Ice	Present
Custody Seals	Not Applicable	Temp (deg C)	2
Seal Condition	Not Applicable	Temp Blank Present	No

Documentation

COC agrees with sample labels? Yes or No Sampler Name: Joseph Sawicki
Chain of Custody (COC) Yes or No MD DW Cert. No : N/A

Sample Container

Appropriate for Specified Analysis?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Custody Seal(s)	Absent
Intact?	<input checked="" type="checkbox"/> <input type="checkbox"/>	Custody Seal(s) Intact?	Not Applicable
Labeled and Labels Legible	<input checked="" type="checkbox"/> <input type="checkbox"/>	Seal(s) Signed / Dated	Not Applicable
Total No. of Samples Received	1	Total No. of Containers Received	8

Preservation

	Yes	No	N/A
Metals (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cyanides (pH>12)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sulfide (pH>9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOC, COD, Phenols (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOX, TKN, NH3, Total Phos (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOC, BTEX (VOA Vials Rcvd Preserved) (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do VOA vials have zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling.

Samples Inspected/Checklist Completed By: [Signature]

Date: 6/10/10

PM Review and Approval: [Signature]

Date: 6/11/10

Analytical Data Package Information Summary for W.O 10060417

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
AD2216A	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1041	S	83021	83021	06/03/2010	06/04/2010	06/14/2010	06/14/2010
SW846 6020A	33220-1-BKS	BKS	33220-1-BKS	1033	S	33220	83077	-----	06/04/2010	06/14/2010	06/16/2010
	33220-1-BLK	BLK	33220-1-BLK	1033	S	33220	83077	-----	06/04/2010	06/14/2010	06/16/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1033	S	33220	83077	06/03/2010	06/04/2010	06/14/2010	06/16/2010
	TP-4 18" S	MS	10061113-021 S	1033	S	33220	83077	06/10/2010	06/04/2010	06/14/2010	06/16/2010
	TP-4 18" SD	MSD	10061113-021 SD	1033	S	33220	83077	06/10/2010	06/04/2010	06/14/2010	06/16/2010
SW846 8081B	33245-1-BKS	BKS	33245-1-BKS	1029	S	33245	83117	-----	06/04/2010	06/16/2010	06/16/2010
	33245-1-BLK	BLK	33245-1-BLK	1029	S	33245	83117	-----	06/04/2010	06/16/2010	06/16/2010
	33245-1-BSD	BSD	33245-1-BSD	1029	S	33245	83117	-----	06/04/2010	06/16/2010	06/16/2010
	AB-6 Surf S	MS	10061419-011 S	1029	S	33245	83117	06/14/2010	06/04/2010	06/16/2010	06/16/2010
	AB-6 Surf SD	MSD	10061419-011 SD	1029	S	33245	83117	06/14/2010	06/04/2010	06/16/2010	06/16/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1029	S	33245	83118	06/03/2010	06/04/2010	06/16/2010	06/16/2010
SW846 8082A	061010-OP-W2048 S	MS	10061117-001 S	1029	S	33246	83120	06/10/2010	06/04/2010	06/16/2010	06/17/2010
	061010-OP-W2048 SD	MSD	10061117-001 SD	1029	S	33246	83120	06/10/2010	06/04/2010	06/16/2010	06/17/2010
	33246-1-BKS	BKS	33246-1-BKS	1029	S	33246	83120	-----	06/04/2010	06/16/2010	06/17/2010
	33246-1-BLK	BLK	33246-1-BLK	1029	S	33246	83120	-----	06/04/2010	06/16/2010	06/17/2010
	33246-1-BSD	BSD	33246-1-BSD	1029	S	33246	83120	-----	06/04/2010	06/16/2010	06/17/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1029	S	33246	83121	06/03/2010	06/04/2010	06/16/2010	06/17/2010
SW846 8151A	33262-1-BKS	BKS	33262-1-BKS	1029	S	33262	83127	-----	06/04/2010	06/17/2010	06/17/2010
	33262-1-BLK	BLK	33262-1-BLK	1029	S	33262	83127	-----	06/04/2010	06/17/2010	06/17/2010
	33262-1-BSD	BSD	33262-1-BSD	1029	S	33262	83127	-----	06/04/2010	06/17/2010	06/17/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1029	S	33262	83127	06/03/2010	06/04/2010	06/17/2010	06/17/2010
	Gude-MW1A-SO-14 to 18 S	MS	10060417-001 S	1029	S	33262	83127	06/03/2010	06/04/2010	06/17/2010	06/17/2010
	Gude-MW1A-SO-14	MSD	10060417-001 SD	1029	S	33262	83127	06/03/2010	06/04/2010	06/17/2010	06/17/2010

Analytical Data Package Information Summary for W.O 10060417

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8151A	to 18 SD										
SW846 8260B	25' NW S	MS	10061105-002 S	1035	S	33203	82991	06/11/2010	06/04/2010	06/11/2010	06/11/2010
	25' NW SD	MSD	10061105-002 SD	1035	S	33203	82991	06/11/2010	06/04/2010	06/11/2010	06/11/2010
	33203-1-BKS	BKS	33203-1-BKS	1035	S	33203	82991	-----	06/04/2010	06/11/2010	06/11/2010
	33203-1-BLK	BLK	33203-1-BLK	1035	S	33203	82991	-----	06/04/2010	06/11/2010	06/11/2010
	33203-1-BSD	BSD	33203-1-BSD	1035	S	33203	82991	-----	06/04/2010	06/11/2010	06/11/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1035	S	33203	82991	06/03/2010	06/04/2010	06/11/2010	06/11/2010
SW846 8270C	33232-1-BKS	BKS	33232-1-BKS	1040	S	33232	83102	-----	06/04/2010	06/15/2010	06/15/2010
	33232-1-BLK	BLK	33232-1-BLK	1040	S	33232	83102	-----	06/04/2010	06/15/2010	06/15/2010
	33232-1-BSD	BSD	33232-1-BSD	1040	S	33232	83102	-----	06/04/2010	06/15/2010	06/15/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1040	S	33232	83102	06/03/2010	06/04/2010	06/15/2010	06/15/2010
	Gude-MW2B-SO-14 to 16 S	MS	10061007-002 S	1040	S	33232	83102	06/09/2010	06/04/2010	06/15/2010	06/15/2010
	Gude-MW2B-SO-14 to 16 SD	MSD	10061007-002 SD	1040	S	33232	83102	06/09/2010	06/04/2010	06/15/2010	06/15/2010
SW846 9014	83086-1-BKS	BKS	83086-1-BKS	1022	S	83086	83086	-----	06/04/2010	06/15/2010	06/15/2010
	83086-1-BLK	BLK	83086-1-BLK	1022	S	83086	83086	-----	06/04/2010	06/15/2010	06/15/2010
	Gude-MW1A-SO-14 to 18	Initial	10060417-001	1022	S	83086	83086	06/03/2010	06/04/2010	06/15/2010	06/15/2010
	Gude-MW1A-SO-14 to 18 S	MS	10060417-001 S	1022	S	83086	83086	06/03/2010	06/04/2010	06/15/2010	06/15/2010
	Gude-MW1A-SO-14 to 18 SD	MSD	10060417-001 SD	1022	S	83086	83086	06/03/2010	06/04/2010	06/15/2010	06/15/2010



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33220-1-BLK Matrix: SOLID
Lab Sample Id: 33220-1-BLK

Analytical Method: SW846 6020A

Prep Method: SW3050B

Date Analyzed: Jun-16-10 11:56

Analyst: 1033

Date Prep: Jun-14-10 14:06

Tech: 1033

Seq Number: 83077

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	2.5	1.3	mg/kg	U	1
Arsenic	7440-38-2	ND	0.5	0.3	mg/kg	U	1
Barium	7440-39-3	ND	2.5	1.3	mg/kg	U	1
Beryllium	7440-41-7	ND	2.5	1.3	mg/kg	U	1
Cadmium	7440-43-9	ND	2.5	1.3	mg/kg	U	1
Chromium	7440-47-3	ND	2.5	1.3	mg/kg	U	1
Cobalt	7440-48-4	ND	2.5	1.3	mg/kg	U	1
Copper	7440-50-8	ND	2.5	1.3	mg/kg	U	1
Lead	7439-92-1	ND	2.5	1.3	mg/kg	U	1
Mercury	7439-97-6	ND	0.10	0.05	mg/kg	U	1
Nickel	7440-02-0	ND	2.5	1.3	mg/kg	U	1
Selenium	7782-49-2	ND	2.5	1.3	mg/kg	U	1
Silver	7440-22-4	ND	2.5	1.3	mg/kg	U	1
Thallium	7440-28-0	ND	2.0	1.0	mg/kg	U	1
Tin	7440-31-5	ND	5.0	2.5	mg/kg	U	1
Vanadium	7440-62-2	ND	2.5	1.3	mg/kg	U	1
Zinc	7440-66-6	ND	10	5.0	mg/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33245-1-BLK
Lab Sample Id: 33245-1-BLK

Matrix: SOLID

Analytical Method: SW846 8081B

Prep Method: SW3550

Date Analyzed: Jun-16-10 21:38

Analyst: 1029

Date Prep: Jun-16-10 08:13

Tech: 1016

Seq Number: 83117

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
alpha-BHC	319-84-6	U	19.78	9.891	ug/kg	U	1
gamma-BHC (Lindane)	58-89-9	U	19.78	9.891	ug/kg	U	1
beta-BHC	319-85-7	U	19.78	9.891	ug/kg	U	1
delta-BHC	319-86-8	U	19.78	9.891	ug/kg	U	1
Heptachlor	76-44-8	U	19.78	9.891	ug/kg	U	1
Aldrin	309-00-2	U	19.78	9.891	ug/kg	U	1
Heptachlor epoxide	1024-57-3	U	19.78	9.891	ug/kg	U	1
gamma-Chlordane	5103-74-2	U	19.78	9.891	ug/kg	U	1
alpha-Chlordane	5103-71-9	U	19.78	9.891	ug/kg	U	1
4,4-DDE	72-55-9	U	19.78	9.891	ug/kg	U	1
Endosulfan I	959-98-8	U	19.78	9.891	ug/kg	U	1
Dieldrin	60-57-1	U	19.78	9.891	ug/kg	U	1
Endrin	72-20-8	U	19.78	9.891	ug/kg	U	1
4,4-DDD	72-54-8	U	19.78	9.891	ug/kg	U	1
Endosulfan II	33213-65-9	U	19.78	9.891	ug/kg	U	1
4,4-DDT	50-29-3	U	19.78	9.891	ug/kg	U	1
Endrin aldehyde	7421-93-4	U	19.78	9.891	ug/kg	U	1
Methoxychlor	72-43-5	U	19.78	9.891	ug/kg	U	1
Endosulfan sulfate	1031-07-8	U	19.78	9.891	ug/kg	U	1
Endrin ketone	53494-70-5	U	19.78	9.891	ug/kg	U	1
Toxaphene	8001-35-2	U	197.8	98.91	ug/kg	U	1
Chlordane	57-74-9	U	197.8	98.91	ug/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33246-1-BLK
Lab Sample Id: 33246-1-BLK

Matrix: SOLID

Analytical Method: SW846 8082A

Prep Method: SW3550

Date Analyzed: Jun-17-10 09:44

Analyst: 1029

Date Prep: Jun-16-10 08:26

Tech: 1016

Seq Number: 83120

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
PCB-1016	12674-11-2	U	0.0989	0.0495	mg/kg	U	1
PCB-1221	11104-28-2	U	0.0989	0.0495	mg/kg	U	1
PCB-1232	11141-16-5	U	0.0989	0.0495	mg/kg	U	1
PCB-1242	53469-21-9	U	0.0989	0.0495	mg/kg	U	1
PCB-1248	12672-29-6	U	0.0989	0.0495	mg/kg	U	1
PCB-1254	11097-69-1	U	0.0989	0.0495	mg/kg	U	1
PCB-1260	11096-82-5	U	0.0989	0.0495	mg/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: **33262-1-BLK** Matrix: **SOLID**
Lab Sample Id: **33262-1-BLK**

Analytical Method: **SW846 8151A** Prep Method: **SW8151A_PREP**
Date Analyzed: Jun-17-10 15:09 Analyst: 1029 Date Prep: Jun-17-10 06:48 Tech: 1028
Seq Number: 83127

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2,4-D	94-75-7	ND	200	100	ug/kg	U	1
2,4,5-TP (Silvex)	93-72-1	ND	20	10	ug/kg	U	1
2,4,5-I	93-76-5	ND	20	10	ug/kg	U	1
Dinoseb	88-85-7	ND	100	50	ug/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33203-1-BLK

Matrix: SOLID

Lab Sample Id: 33203-1-BLK

Analytical Method: SW846 8260B

Prep Method: SW5030

Date Analyzed: Jun-11-10 12:57

Analyst: 1035

Date Prep: Jun-11-10 09:38

Tech: 1035

Seq Number: 82991

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	ND	5	2.5	ug/kg	U	1
Chloromethane	74-87-3	ND	5	2.5	ug/kg	U	1
Vinyl Chloride	75-01-4	ND	5	2.5	ug/kg	U	1
Bromomethane	74-83-9	ND	5	2.5	ug/kg	U	1
Chloroethane	75-00-3	ND	5	2.5	ug/kg	U	1
Acetone	67-64-1	ND	20	10	ug/kg	U	1
Trichlorofluoromethane	75-69-4	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethene	75-35-4	ND	5	2.5	ug/kg	U	1
Methylene chloride	75-09-2	ND	5	2.5	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethane	75-34-3	ND	5	2.5	ug/kg	U	1
Vinyl acetate	108-05-4	ND	5	2.5	ug/kg	U	1
2-Butanone (MEK)	78-93-3	ND	20	10	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	ND	5	2.5	ug/kg	U	1
Bromochloromethane	74-97-5	ND	5	2.5	ug/kg	U	1
Chloroform	67-66-3	ND	5	2.5	ug/kg	U	1
2,2-Dichloropropane	594-20-7	ND	5	2.5	ug/kg	U	1
1,1,1-Trichloroethane	71-55-6	ND	5	2.5	ug/kg	U	1
1,2-Dichloroethane	107-06-2	ND	5	2.5	ug/kg	U	1
1,1-Dichloropropene	563-58-6	ND	5	2.5	ug/kg	U	1
Carbon tetrachloride	56-23-5	ND	5	2.5	ug/kg	U	1
Benzene	71-43-2	ND	5	2.5	ug/kg	U	1
Dibromomethane	74-95-3	ND	5	2.5	ug/kg	U	1
1,2-Dichloropropane	78-87-5	ND	5	2.5	ug/kg	U	1
Carbon Disulfide	75-15-0	ND	10	5.0	ug/kg	U	1
Trichloroethene	79-01-6	ND	5	2.5	ug/kg	U	1
Acrylonitrile	107-13-1	ND	20	10	ug/kg	U	1
Bromodichloromethane	75-27-4	ND	5	2.5	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	5	2.5	ug/kg	U	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ND	20	10	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	ND	5	2.5	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	ND	5	2.5	ug/kg	U	1
Toluene	108-88-3	ND	5	2.5	ug/kg	U	1
1,3-Dichloropropane	142-28-9	ND	5	2.5	ug/kg	U	1
2-Hexanone (MBK)	591-78-6	ND	20	10	ug/kg	U	1
1,2-Dibromoethane	106-93-4	ND	5	2.5	ug/kg	U	1
Dibromochloromethane	124-48-1	ND	5	2.5	ug/kg	U	1
Acrolein	107-02-8	ND	20	10	ug/kg	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	5	2.5	ug/kg	U	1
Bromoform	75-25-2	ND	5	2.5	ug/kg	U	1
trans-1,4-dichloro-2-butene	110-57-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33203-1-BLK
Lab Sample Id: 33203-1-BLK

Matrix: SOLID

Analytical Method: SW846 8260B

Prep Method: SW5030

Date Analyzed: Jun-11-10 12:57

Analyst: 1035

Date Prep: Jun-11-10 09:38

Tech: 1035

Seq Number: 82991

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Tetrachloroethene	127-18-4	ND	5	2.5	ug/kg	U	1
Chlorobenzene	108-90-7	ND	5	2.5	ug/kg	U	1
Ethylbenzene	100-41-4	ND	5	2.5	ug/kg	U	1
m&p-Xylene	108-38-3	ND	10	5.0	ug/kg	U	1
Styrene	100-42-5	ND	5	2.5	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	2.5	ug/kg	U	1
o-Xylene	95-47-6	ND	5	2.5	ug/kg	U	1
1,2,3-Trichloropropane	96-18-4	ND	5	2.5	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	ND	5	2.5	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	ND	5	2.5	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	ND	5	2.5	ug/kg	U	1
1,2-Dibromo-3-chloropropane	96-12-8	ND	40	20	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	5	2.5	ug/kg	U	1
Iodomethane	74-88-4	ND	20	10	ug/kg	U	1
Naphthalene	91-20-3	ND	5	2.5	ug/kg	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33232-1-BLK

Matrix: SOLID

Lab Sample Id: 33232-1-BLK

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jun-15-10 18:23

Analyst: 1040

Date Prep: Jun-15-10 09:46

Tech: 1022

Seq Number: 83102

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Acenaphthene	83-32-9	ND	170	83	ug/kg	U	1
Acenaphthylene	208-96-8	ND	170	83	ug/kg	U	1
Acetophenone	98-86-2	ND	170	83	ug/kg	U	1
Anthracene	120-12-7	ND	170	83	ug/kg	U	1
Benzo(a)anthracene	56-55-3	ND	170	83	ug/kg	U	1
Benzo(a)pyrene	50-32-8	ND	23	23	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	ND	170	83	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	ND	170	83	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	ND	170	83	ug/kg	U	1
Benzyl Butyl Phthalate	85-68-7	ND	170	83	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	ND	170	83	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	ND	170	83	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	ND	170	83	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	ND	170	83	ug/kg	U	1
4-Bromophenylphenyl ether	101-55-3	ND	170	83	ug/kg	U	1
di-n-Butyl Phthalate	84-74-2	ND	330	170	ug/kg	U	1
4-Chloro-3-methylphenol	59-50-7	ND	170	83	ug/kg	U	1
4-Chloroaniline	106-47-8	ND	330	170	ug/kg	U	1
2-Chloronaphthalene	91-58-7	ND	170	83	ug/kg	U	1
2-Chlorophenol	95-57-8	ND	170	83	ug/kg	U	1
4-Chlorophenyl Phenyl Ether	7005-72-3	ND	170	83	ug/kg	U	1
Chrysene	218-01-9	ND	170	83	ug/kg	U	1
Dibenz(a,h)Anthracene	53-70-3	ND	23	23	ug/kg	U	1
Dibenzofuran	132-64-9	ND	170	83	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	ND	170	83	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	ND	170	83	ug/kg	U	1
Diethyl Phthalate	84-66-2	ND	170	83	ug/kg	U	1
Dimethyl phthalate	131-11-3	ND	170	83	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	ND	170	83	ug/kg	U	1
4,6-dinitro-2-methyl phenol	534-52-1	ND	170	83	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	ND	330	170	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	ND	330	83	ug/kg	U	1
2,6-Dinitrotoluene, 2,6-DNTI	606-20-2	ND	170	83	ug/kg	U	1
Fluoranthene	206-44-0	ND	170	83	ug/kg	U	1
Fluorene	86-73-7	ND	170	83	ug/kg	U	1
Hexachlorobenzene	118-74-1	ND	330	83	ug/kg	U	1
Hexachlorobutadiene	87-68-3	ND	330	83	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	ND	170	83	ug/kg	U	1
Hexachloroethane	67-72-1	ND	330	83	ug/kg	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	ND	170	83	ug/kg	U	1
Isophorone	78-59-1	ND	170	83	ug/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33232-1-BLK Matrix: SOLID
Lab Sample Id: 33232-1-BLK

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jun-15-10 18:23

Analyst: 1040

Date Prep: Jun-15-10 09:46

Tech: 1022

Seq Number: 83102

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2-Methylnaphthalene	91-57-6	ND	170	83	ug/kg	U	1
2-Methylphenol	95-48-7	ND	330	83	ug/kg	U	1
3&4-Methylphenol		ND	330	83	ug/kg	U	1
4-Nitroaniline	100-01-6	ND	170	83	ug/kg	U	1
3-Nitroaniline	99-09-2	ND	170	83	ug/kg	U	1
2-Nitroaniline	88-74-4	ND	330	170	ug/kg	U	1
Nitrobenzene	98-95-3	ND	330	83	ug/kg	U	1
2-Nitrophenol	88-75-5	ND	170	83	ug/kg	U	1
4-Nitrophenol	100-02-7	ND	170	83	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	ND	170	83	ug/kg	U	1
N-Nitrosodi-n-Propylamine	621-64-7	ND	66	33	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	ND	170	83	ug/kg	U	1
di-n-Octyl Phthalate	117-84-0	ND	170	83	ug/kg	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	170	83	ug/kg	U	1
Pentachlorophenol	87-86-5	ND	330	170	ug/kg	U	1
Phenanthrene	85-01-8	ND	170	83	ug/kg	U	1
Phenol	108-95-2	ND	170	83	ug/kg	U	1
Pyrene	129-00-0	ND	170	83	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	ND	170	83	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	ND	330	83	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	ND	330	83	ug/kg	U	1



Blank Summary 10060417

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 83086-1-BLK	Matrix: SOLID
Lab Sample Id: 83086-1-BLK	

Analytical Method: SW846 9014	Prep Method:						
Date Analyzed: Jun-15-10 00:00	Analyst: 1022	Date Prep:			Tech: 1022		
	Seq Number: 83086						
Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Cyanide, Total	57-12-5	ND	2.5	1.3	mg/kg	U	1



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 83127

Sample: 10060417-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	65.1	50.00	130	40-165	

Lab Batch #: 83127

Sample: 10060417-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	58.3	50.00	117	40-165	

Lab Batch #: 83127

Sample: 10060417-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	57.6	50.00	115	40-165	

Lab Batch #: 83127

Sample: 33262-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	49.9	50.00	100	40-165	

Lab Batch #: 83127

Sample: 33262-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	47.4	50.00	95	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 83127

Sample: 33262-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	47.6	50.00	95	40-165	

Lab Batch #: 83117

Sample: 10061419-011 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.7	25.00	95	55-143	
Tetrachloro-m-xylene	15.8	25.00	63	32-133	

Lab Batch #: 83117

Sample: 10061419-011 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.1	25.00	101	55-143	
Tetrachloro-m-xylene	20.6	25.00	82	32-133	

Lab Batch #: 83117

Sample: 33245-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.9	25.00	99	55-143	
Tetrachloro-m-xylene	23.2	25.00	93	32-133	

Lab Batch #: 83117

Sample: 33245-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	22.0	25.00	88	55-143	
Tetrachloro-m-xylene	19.1	25.00	76	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 83117

Sample: 33245-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	22.2	25.00	89	55-143	
Tetrachloro-m-xylene	21.0	25.00	84	32-133	

Lab Batch #: 83118

Sample: 10060417-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	27.1	25.00	108	55-143	
Tetrachloro-m-xylene	22.6	25.00	90	32-133	

Lab Batch #: 83120

Sample: 10061117-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	19.9	25.00	80	43-124	
Tetrachloro-m-xylene	16.7	25.00	67	44-97	

Lab Batch #: 83120

Sample: 10061117-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	20.1	25.00	80	43-124	
Tetrachloro-m-xylene	20.9	25.00	84	44-97	

Lab Batch #: 83120

Sample: 33246-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.4	25.00	97	43-124	
Tetrachloro-m-xylene	23.0	25.00	92	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 83120

Sample: 33246-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	20.5	25.00	82	43-124	
Tetrachloro-m-xylene	17.9	25.00	72	44-97	

Lab Batch #: 83120

Sample: 33246-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.4	25.00	98	43-124	
Tetrachloro-m-xylene	21.4	25.00	86	44-97	

Lab Batch #: 83121

Sample: 10060417-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.4	25.00	105	43-124	
Tetrachloro-m-xylene	22.3	25.00	89	44-97	

Lab Batch #: 83102

Sample: 10060417-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2830	3330	85	48-112	
2-Fluorophenol	3550	6660	53	45-107	
Nitrobenzene-d5	2880	3330	86	44-98	
Phenol-d6	5400	6660	81	38-100	
Terphenyl-D14	3120	3330	94	34-165	
2,4,6-Tribromophenol	6040	6660	91	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 83102

Sample: 10061007-002 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3170	3320	95	48-112	
2-Fluorophenol	6130	6650	92	45-107	
Nitrobenzene-d5	3150	3320	95	44-98	
Phenol-d6	5980	6650	90	38-100	
Terphenyl-D14	3520	3320	106	34-165	
2,4,6-Tribromophenol	6930	6650	104	44-104	

Lab Batch #: 83102

Sample: 10061007-002 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3190	3330	96	48-112	
2-Fluorophenol	6270	6660	94	45-107	
Nitrobenzene-d5	3170	3330	95	44-98	
Phenol-d6	6020	6660	90	38-100	
Terphenyl-D14	3480	3330	104	34-165	
2,4,6-Tribromophenol	6770	6660	102	44-104	

Lab Batch #: 83102

Sample: 33232-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3070	3330	92	48-112	
2-Fluorophenol	6190	6650	93	45-107	
Nitrobenzene-d5	3120	3330	94	44-98	
Phenol-d6	5830	6650	88	38-100	
Terphenyl-D14	3510	3330	105	34-165	
2,4,6-Tribromophenol	6660	6650	100	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 83102

Sample: 33232-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2970	3320	89	48-112	
2-Fluorophenol	6130	6650	92	45-107	
Nitrobenzene-d5	3140	3320	95	44-98	
Phenol-d6	5800	6650	87	38-100	
Terphenyl-D14	3040	3320	92	34-165	
2,4,6-Tribromophenol	6390	6650	96	44-104	

Lab Batch #: 83102

Sample: 33232-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3040	3320	92	48-112	
2-Fluorophenol	6180	6640	93	45-107	
Nitrobenzene-d5	3080	3320	93	44-98	
Phenol-d6	5840	6640	88	38-100	
Terphenyl-D14	3190	3320	96	34-165	
2,4,6-Tribromophenol	6570	6640	99	44-104	

Lab Batch #: 82991

Sample: 10060417-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.2	50.00	104	90-113	
Toluene-D8	49.5	50.00	99	90-108	
4-Bromofluorobenzene	51.0	50.00	102	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 82991

Sample: 10061105-002 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.6	50.00	103	90-113	
Toluene-D8	48.9	50.00	98	90-108	
4-Bromofluorobenzene	51.0	50.00	102	79-125	

Lab Batch #: 82991

Sample: 10061105-002 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	49.2	50.00	98	90-108	
4-Bromofluorobenzene	49.3	50.00	99	79-125	

Lab Batch #: 82991

Sample: 33203-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.3	50.00	101	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	48.3	50.00	97	79-125	

Lab Batch #: 82991

Sample: 33203-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.8	50.00	102	90-113	
Toluene-D8	49.5	50.00	99	90-108	
4-Bromofluorobenzene	51.7	50.00	103	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10060417

Project ID: N/A

Lab Batch #: 82991

Sample: 33203-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	51.0	50.00	102	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	47.8	50.00	96	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

York Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 83117

Units: ug/kg

Sample: 33245-1-BKS

Method: SW3550 / SW8081B

Project ID: N/A

Analyst: 1029

Matrix: Solid

Date Prepared: 06/16/2010

Date Analyzed: 06/16/2010

Organochlorine Pesticides	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
alpha-BHC	<19.78	19.72	19.90	101	19.82	<19.82	0	200	80-126	25	LF	
gamma-BHC (Lindane)	<19.78	19.72	20.24	103	19.82	20.06	101	2	81-124	25		
beta-BHC	<19.78	19.72	<19.72	0	19.82	<19.82	0	NC	77-121	25	L	
delta-BHC	<19.78	19.72	21.73	110	19.82	21.61	109	1	75-126	25		
Heptachlor	<19.78	19.72	<19.72	0	19.82	<19.82	0	NC	76-120	25	L	
Aldrin	<19.78	19.72	19.85	101	19.82	<19.82	0	200	81-122	25	LF	
Heptachlor epoxide	<19.78	19.72	20.13	102	19.82	19.93	101	1	81-123	25		
gamma-Chlordane	<19.78	19.72	22.09	112	19.82	21.84	110	2	89-135	25		
alpha-Chlordane	<19.78	19.72	20.18	102	19.82	19.94	101	1	82-121	25		
4,4-DDE	<19.78	19.72	21.04	107	19.82	20.61	104	3	78-138	25		
Endosulfan I	<19.78	19.72	20.06	102	19.82	19.87	100	2	82-123	25		
Dieldrin	<19.78	19.72	20.45	104	19.82	20.31	102	2	81-126	25		
Endrin	<19.78	19.72	21.36	108	19.82	21.10	106	2	70-131	25		
4,4-DDD	<19.78	19.72	22.10	112	19.82	21.64	109	3	68-143	25		
Endosulfan II	<19.78	19.72	<19.72	0	19.82	20.72	105	200	80-133	25	LF	
4,4-DDT	<19.78	19.72	21.91	111	19.82	21.38	108	3	68-129	25		
Endrin aldehyde	<19.78	19.72	20.04	102	19.82	22.49	113	10	77-127	25		
Methoxychlor	<19.78	19.72	<19.72	0	19.82	20.35	103	200	67-121	25	LF	
Endosulfan sulfate	<19.78	19.72	<19.72	0	19.82	21.38	108	200	79-126	25	LF	
Endrin ketone	<19.78	19.72	20.60	104	19.82	21.67	109	5	82-137	25		

Relative Percent Difference RPD = $200 * [(D-G) / (D+G)]$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

Phase Separation Science, Inc.
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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 83120

Units: mg/kg

Date Prepared: 06/16/2010

Date Analyzed: 06/17/2010

Sample: 33246-1-BKS

Method: SW3550 / SW8082

Project ID: N/A

Analyst: 1029

Matrix: Solid

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
PCB-1016	<0.0989	0.4936	0.4482	91	0.4926	0.4265	87	4	59-123	25	
PCB-1260	<0.0989	0.4936	0.5051	102	0.4926	0.4888	99	3	54-152	25	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 83127

Units: ug/kg

Sample: 33262-1-BKS

Method: SW8151A_PREP / SW8151

Project ID: N/A

Analyst: 1029

Matrix: Solid

Date Prepared: 06/17/2010

Date Analyzed: 06/17/2010

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<99.80	992.1	897.2	90	994.0	881.6	89	1	65-110	25	
2,4,5-TP (Silvex)	<9.980	99.21	90.87	92	99.4	88.07	89	3	58-130	25	
2,4,5-T	<9.980	99.21	105.9	107	99.4	102.4	103	4	81-130	25	
Dinoseb	<49.90	496	430	87	497.0	406.9	82	6	62-102	25	

Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 82991

Units: ug/kg

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

Sample: 33203-1-BKS

Method: SW5030 / SW8260B

Project ID: N/A

Analyst: 1035

Matrix: Solid

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Dichlorodifluoromethane	<2.500	60.00	81.76	136	60.0	88.20	147	8	55-125	23	H
Chloromethane	<2.500	60.00	79.69	133	60.0	83.90	140	5	62-125	30	H
Vinyl Chloride	<2.500	60.00	84.53	141	60.0	86.08	143	1	65-130	25	H
Bromomethane	<2.500	60.00	81.10	135	60.0	82.59	138	2	59-131	20	H
Chloroethane	<2.500	60.00	85.27	142	60.0	87.05	145	2	57-135	20	H
Acetone	<10.00	60.00	46.23	77	60.0	43.37	72	7	7-180	21	
Trichlorofluoromethane	<2.500	60.00	83.95	140	60.0	91.82	153	9	55-133	25	H
1,1-Dichloroethene	<2.500	60.00	77.17	129	60.0	79.74	133	3	60-122	14	H
Methylene chloride	<2.500	60.00	69.13	115	60.0	72.11	120	4	63-125	35	
trans-1,2-Dichloroethene	<2.500	60.00	81.40	136	60.0	77.16	129	5	62-129	20	H
1,1-Dichloroethane	<2.500	60.00	76.73	128	60.0	78.71	131	2	55-135	20	
Vinyl acetate	<2.500	60.00	65.56	109	60.0	67.22	112	3	57-136	25	
2-Butanone (MEK)	<10.00	60.00	44.74	75	60.0	43.79	73	3	36-201	30	
cis-1,2-Dichloroethene	<2.500	60.00	74.36	124	60.0	78.62	131	5	60-127	20	H
Bromochloromethane	<2.500	60.00	71.51	119	60.0	73.69	123	3	66-127	20	
Chloroform	<2.500	60.00	71.78	120	60.0	74.38	124	3	64-113	20	H
2,2-Dichloropropane	<2.500	60.00	75.98	127	60.0	78.68	131	3	53-129	20	H
1,1,1-Trichloroethane	<2.500	60.00	77.12	129	60.0	82.74	138	7	57-127	20	H
1,2-Dichloroethane	<2.500	60.00	68.73	115	60.0	70.07	117	2	62-124	20	
1,1-Dichloropropene	<2.500	60.00	78.22	130	60.0	82.71	138	6	61-122	20	H

Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 82991

Units: ug/kg

Sample: 33203-1-BKS

Project ID: N/A
Analyst: 1035
Matrix: Solid

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

TCL Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon tetrachloride	<2.500	60.00	79.70	133	60.0	84.07	140	5	55-131	20	H
Benzene	<2.500	60.00	74.70	125	60.0	77.75	130	4	64-114	11	H
Dibromomethane	<2.500	60.00	68.97	115	60.0	70.25	117	2	64-132	23	
1,2-Dichloropropane	<2.500	60.00	71.45	119	60.0	73.74	123	3	61-117	20	H
Carbon Disulfide	<5.000	60.00	75.72	126	60.0	79.18	132	5	37-161	24	
Trichloroethene	<2.500	60.00	78.81	131	60.0	80.47	134	2	62-121	14	H
Acrylonitrile	<10.00	60.00	68.01	113	60.0	65.69	109	4	59-168	14	
Bromodichloromethane	<2.500	60.00	72.28	120	60.0	73.05	122	2	62-126	20	
cis-1,3-Dichloropropene	<2.500	60.00	73.43	122	60.0	74.58	124	2	59-119	20	H
4-Methyl-2-Pentanone (MIBK)	<10.00	60.00	49.42	82	60.0	46.11	77	6	59-148	25	
trans-1,3-Dichloropropene	<2.500	60.00	71.89	120	60.0	73.54	123	2	51-126	20	
1,1,2-Trichloroethane	<2.500	60.00	69.69	116	60.0	70.82	118	2	60-134	20	
Toluene	<2.500	60.00	77.13	129	60.0	80.11	134	4	64-117	13	H
1,3-Dichloropropane	<2.500	60.00	66.25	110	60.0	67.12	112	2	61-129	20	
2-Hexanone (MBK)	<10.00	60.00	45.40	76	60.0	43.71	73	4	9-176	21	
1,2-Dibromoethane	<2.500	60.00	68.66	114	60.0	69.50	116	2	65-135	20	
Dibromochloromethane	<2.500	60.00	69.43	116	60.0	71.41	119	3	67-126	20	
Acrolein	<10.00	60.00	68.98	115	60.0	71.05	118	3	52-168	20	
1,1,1,2-Tetrachloroethane	<2.500	60.00	73.55	123	60.0	75.26	125	2	64-121	20	H
Bromoform	<2.500	60.00	71.10	119	60.0	70.89	118	1	62-120	20	

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Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
Laboratory Control Sample (LCS) Percent Recovery $RD = 100 * (C) / (B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 82991

Units: ug/kg

Sample: 33203-1-BKS

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

Project ID: N/A
Analyst: 1035
Matrix: Solid

TCL Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
trans-1,4-dichloro-2-butene	<2.500	60.00	66.58	111	60.0	65.20	109	2	43-133	20	
Tetrachloroethene	<2.500	60.00	78.56	131	60.0	84.28	140	7	58-129	20	H
Chlorobenzene	<2.500	60.00	72.74	121	60.0	75.15	125	3	64-116	13	H
Ethylbenzene	<2.500	60.00	76.15	127	60.0	79.67	133	5	61-118	30	H
m&p-Xylene	<5.000	120	154.8	129	120.0	161.4	135	5	63-116	20	H
Styrene	<2.500	60.00	75.83	126	60.0	78.43	131	4	60-112	51	H
1,1,2,2-Tetrachloroethane	<2.500	60.00	60.65	101	60.0	61.18	102	1	58-144	31	
o-Xylene	<2.500	60.00	76.66	128	60.0	79.80	133	4	65-117	20	H
1,2,3-Trichloropropane	<2.500	60.00	68.38	114	60.0	66.44	111	3	59-139	20	
1,3-Dichlorobenzene	<2.500	60.00	72.54	121	60.0	74.91	125	3	58-123	20	H
1,4-Dichlorobenzene	<2.500	60.00	70.92	118	60.0	73.35	122	3	58-121	20	H
1,2-Dichlorobenzene	<2.500	60.00	70.54	118	60.0	72.15	120	2	59-124	20	
1,2-Dibromo-3-chloropropane	<20.00	60.00	65.57	109	60.0	62.66	104	5	57-144	28	
1,2,4-Trichlorobenzene	<2.500	60.00	74.49	124	60.0	76.31	127	2	46-122	20	H
Iodomethane	<10.00	60.00	67.34	112	60.0	69.60	116	4	46-137	25	
Naphthalene	<2.500	60.00	71.54	119	60.0	72.29	120	1	54-164	20	
1,2,3-Trichlorobenzene	<2.500	60.00	73.18	122	60.0	74.28	124	2	48-126	20	

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Relative Percent Difference $RPD = 200 * (D-G) / (D+G)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 83102

Units: ug/kg

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Sample: 33232-1-BKS

Method: SW3550 / SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Solid

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
TCL Semivolatile Organic Compounds												
Acenaphthene	<83.06	1331	1376	103	1327.0	1360	102	1	63-120	25		
Acenaphthylene	<83.06	1331	1430	107	1327.0	1428	108	1	59-125	25		
Acetophenone	<83.06	1331	1448	109	1327.0	1445	109	0	57-122	25		
Anthracene	<83.06	1331	1460	110	1327.0	1438	108	2	63-121	25		
Benzo(a)anthracene	<83.06	1331	1591	120	1327.0	1542	116	3	61-130	25		
Benzo(a)pyrene	<23.26	1331	1511	114	1327.0	1477	111	3	58-141	25		
Benzo(b)fluoranthene	<83.06	1331	1659	125	1327.0	1647	124	1	59-140	25		
Benzo(g,h,i)perylene	<83.06	1331	1618	122	1327.0	1613	122	0	32-158	25		
Benzo(k)fluoranthene	<83.06	1331	1514	114	1327.0	1496	113	1	55-137	25		
Benzyl Butyl Phthalate	<83.06	1331	1477	111	1327.0	1368	103	7	57-132	25		
bis(2-chloroethoxy) methane	<83.06	1331	1333	100	1327.0	1321	100	0	61-123	30		
bis(2-chloroethyl) ether	<83.06	1331	849	64	1327.0	867.3	65	2	55-127	25		
bis(2-chloroisopropyl) ether	<83.06	1331	1294	97	1327.0	1293	97	0	42-128	25		
bis(2-ethylhexyl) phthalate	<83.06	1331	1386	104	1327.0	1288	97	7	52-142	25		
4-Bromophenylphenyl ether	<83.06	1331	1425	107	1327.0	1423	107	0	66-138	30		
di-n-Butyl Phthalate	<166.1	1331	1468	110	1327.0	1467	111	1	54-126	25		
4-Chloro-3-methylphenol	<83.06	1331	1527	115	1327.0	1505	113	2	63-125	25		
4-Chloroaniline	<166.1	1331	1499	113	1327.0	1462	110	3	64-118	25		
2-Chloronaphthalene	<83.06	1331	1372	103	1327.0	1368	103	0	62-117	25		
2-Chlorophenol	<83.06	1331	1467	110	1327.0	1473	111	1	57-128	25		

Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417
 Prep Batch #: 1
 Lab Batch ID: 83102
 Units: ug/kg

Date Prepared: 06/15/2010
 Date Analyzed: 06/15/2010

Sample: 33232-1-BKS
 Project ID: N/A
 Analyst: 1040
 Matrix: Solid

TCL Semivolatile Organic Compounds	Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
4-Chlorophenyl Phenyl Ether		<83.06	1331	1426	107	1327.0	1416	107	0	65-129	25	
Chrysene		<83.06	1331	1532	115	1327.0	1501	113	2	62-127	25	
Dibenz(a,h)Anthracene		<23.26	1331	1640	123	1327.0	1649	124	1	43-148	25	
Dibenzofuran		<83.06	1331	1437	108	1327.0	1419	107	1	63-120	25	
3,3-Dichlorobenzidine		<83.06	1331	1600	120	1327.0	1566	118	2	32-138	25	
2,4-Dichlorophenol		<83.06	1331	1472	111	1327.0	1456	110	1	65-127	25	
Diethyl Phthalate		<83.06	1331	1461	110	1327.0	1454	110	0	58-124	25	
Dimethyl phthalate		<83.06	1331	1447	109	1327.0	1445	109	0	55-125	25	
2,4-Dimethylphenol		<83.06	1331	1483	111	1327.0	1473	111	0	65-124	30	
4,6-dinitro-2-methyl phenol		<83.06	1331	1954	147	1327.0	1933	146	1	26-167	25	
2,4-Dinitrophenol		<166.1	1331	2058	155	1327.0	2024	153	1	18-177	25	
2,4-Dinitrotoluene		<83.06	1331	1648	124	1327.0	1617	122	2	60-134	25	
2,6-Dinitrotoluene, 2,6-DNT		<83.06	1331	1606	121	1327.0	1606	121	0	63-136	25	
Fluoranthene		<83.06	1331	1581	119	1327.0	1560	118	1	54-127	25	
Fluorene		<83.06	1331	1426	107	1327.0	1416	107	0	64-119	25	
Hexachlorobenzene		<83.06	1331	1340	101	1327.0	1341	101	0	58-124	25	
Hexachlorobutadiene		<83.06	1331	1432	108	1327.0	1415	107	1	64-128	25	
Hexachlorocyclopentadiene		<83.06	1331	1747	131	1327.0	1716	129	2	26-152	25	
Hexachloroethane		<83.06	1331	1461	110	1327.0	1474	111	1	55-125	25	
Indeno(1,2,3-c,d)Pyrene		<83.06	1331	1721	129	1327.0	1754	132	2	38-150	25	

Relative Percent Difference RPD = $200 * [(D-G)/(D+G)]$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 83102

Units: ug/kg

Sample: 33232-1-BKS

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Project ID: N/A
Analyst: 1040
Matrix: Solid

TCL Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Isophorone	<83.06	1331	1378	104	1327.0	1358	102	2	56-120	25	
2-Methylnaphthalene	<83.06	1331	1367	103	1327.0	1357	102	1	63-120	25	
2-Methylphenol	<83.06	1331	1434	108	1327.0	1448	109	1	57-121	30	
3&4-Methylphenol	<83.06	1331	1476	111	1327.0	1481	112	1	49-123	30	
4-Nitroaniline	<83.06	1331	1840	138	1327.0	1746	132	4	53-128	25	H
3-Nitroaniline	<83.06	1331	1623	122	1327.0	1583	119	2	53-132	25	
2-Nitroaniline	<166.1	1331	1670	125	1327.0	1649	124	1	54-131	25	
Nitrobenzene	<83.06	1331	1395	105	1327.0	1389	105	0	53-119	25	
2-Nitroptenol	<83.06	1331	1597	120	1327.0	1597	120	0	65-137	25	
4-Nitrophenol	<83.06	1331	1694	127	1327.0	1598	120	6	50-123	25	H
N-Nitrosodimethylamine	<83.06	1331	1355	102	1327.0	1356	102	0	62-123	25	
N-Nitrosodi-n-Propylamine	<33.22	1331	1387	104	1327.0	1388	105	1	46-121	25	
N-Nitrosodiphenylamine	<83.06	1331	1341	101	1327.0	1346	101	0	56-129	25	
di-n-Octyl Phthalate	<83.06	1331	1495	112	1327.0	1363	103	8	38-144	25	
1,2,4,5-Tetrachlorobenzene	<83.06	1331	1426	107	1327.0	1422	107	0	64-127	25	
Pentachlorophenol	<166.1	1331	1591	120	1327.0	1553	117	3	46-134	25	
Phenanthrene	<83.06	1331	1387	104	1327.0	1368	103	1	61-119	25	
Phenol	<83.06	1331	1295	97	1327.0	1310	99	2	47-108	25	
Pyrene	<83.06	1331	1485	112	1327.0	1349	102	9	54-141	25	
2,3,4,6-Tetrachlorophenol	<83.06	1331	1546	116	1327.0	1502	113	3	56-130	25	

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Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 1

Lab Batch ID: 83102

Units: ug/kg

Project ID: N/A

Analyst: 1040

Matrix: Solid

Sample: 33232-1-BKS

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

TCL Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4,6-Trichlorophenol	<83.06	1331	1580	119	1327.0	1565	118	1	67-127	25	
2,4,5-Trichlorophenol	<83.06	1331	1644	124	1327.0	1602	121	2	69-132	25	

Analytes

Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits

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Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10060417

Project ID: N/A

Prep Batch #:

Date Prepared: 06/15/2010

Sample ID: 83086-1-BKS

Matrix: Solid

Lab Batch ID 83086

Date Analyzed: 06/15/2010

Analyst: 1022

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Cyanide Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Cyanide, Total	<2.500	5.000	4.910	98	80-120	

Prep Batch #: 33220

Date Prepared: 06/14/2010

Sample ID: 33220-1-BKS

Matrix: Solid

Lab Batch ID 83077

Date Analyzed: 06/16/2010

Analyst: 1033

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<2.500	20.00	19.87	99	75-125	
Arsenic	<0.5000	20.00	19.65	98	75-125	
Barium	<2.500	20.00	19.74	99	75-125	
Beryllium	<2.500	20.00	18.91	95	75-125	
Cadmium	<2.500	20.00	19.05	95	75-125	
Chromium	<2.500	20.00	20.36	102	75-125	
Cobalt	<2.500	20.00	19.69	98	75-125	
Copper	<2.500	20.00	19.47	97	75-125	
Lead	<2.500	20.00	20.08	100	75-125	
Mercury	<0.1000	0.5000	0.4950	99	75-125	
Nickel	<2.500	20.00	20.52	103	75-125	
Selenium	<2.500	20.00	18.37	92	75-125	
Silver	<2.500	20.00	20.17	101	75-125	
Thallium	<2.000	20.00	19.89	99	75-125	
Tin	<5.000	20.00	19.71	99	75-125	
Vanadium	<2.500	20.00	19.80	99	75-125	
Zinc	<10.00	20.00	19.01	95	75-125	

Blank Spike Recovery [D] = 100*(([C]-[A])/[B])

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H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 33220

Lab Batch ID: 83077

Reporting Units: mg/kg

Date Prepared: 06/14/2010
Date Analyzed: 06/16/2010

Client Sample Id: TP-4 18" S
Sample ID: 10061113-021 S
Method: SW3050B/SW6020

Project ID: N/A
Analyst: 1033
Matrix: Soil

Total Metals Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Antimony	<2.823	22.03	15.94	72	20.16	14.25	71	1	75-125	30	X
Arsenic	63.57	22.03	87.66	109	20.16	85.70	110	1	75-125	30	
Barium	111.1	22.03	133.5	102	20.16	130.1	94	8	75-125	30	
Beryllium	<2.823	22.03	20.73	94	20.16	18.74	93	1	75-125	30	
Cadmium	<2.823	22.03	22.39	102	20.16	20.42	101	1	75-125	30	
Chromium	54.82	22.03	69.49	67	20.16	69.92	75	11	75-125	30	X
Cobalt	22.75	22.03	41.85	87	20.16	39.24	82	6	75-125	30	
Copper	61.71	22.03	89.70	127	20.16	82.47	103	21	75-125	30	X
Lead	230.1	22.03	261.6	143	20.16	280	248	54	75-125	30	XF
Mercury	<0.1129	0.5506	0.6718	122	0.5041	0.6100	121	1	75-125	30	
Nickel	26.11	22.03	50.54	111	20.16	46.91	103	7	75-125	30	
Selenium	<2.823	22.03	19.61	89	20.16	17.51	87	2	75-125	30	
Silver	<2.823	22.03	23.23	105	20.16	21.14	105	0	75-125	30	
Thallium	<2.258	22.03	24.05	109	20.16	22.06	109	0	75-125	30	
Tin	<5.646	22.03	24.88	113	20.16	22.90	114	1	75-125	30	
Vanadium	90.05	22.03	106.9	76	20.16	121.9	158	70	75-125	30	XF
Zinc	48.56	22.03	72.74	110	20.16	70.32	108	2	75-125	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of OC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 33245

Lab Batch ID: 83117

Reporting Units: ug/kg

Date Prepared: 06/16/2010

Date Analyzed: 06/16/2010

Client Sample Id: AB-6 Surf S

Sample ID: 10061419-011 S

Method: SW3550/SW8081B

Project ID: N/A

Analyst: 1029

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<28.78	28.89	<28.89	83	28.86	<28.86	99	18	70-130	30	
gamma-BHC (Lindane)	<28.78	28.89	<28.89	88	28.86	29.35	102	15	72-128	30	
beta-BHC	<28.78	28.89	<28.89	97	28.86	<28.86	98	1	74-121	30	
delta-BHC	<28.78	28.89	31.20	108	28.86	31.62	110	2	72-127	30	
Heptachlor	<28.78	28.89	<28.89	83	28.86	<28.86	96	15	66-127	30	
Aldrin	<28.78	28.89	<28.89	87	28.86	<28.86	98	12	71-130	30	
Heptachlor epoxide	<28.78	28.89	<28.89	96	28.86	<28.86	100	4	73-128	30	
gamma-Chlordane	<28.78	28.89	31.48	109	28.86	32.30	112	3	73-153	30	
alpha-Chlordane	<28.78	28.89	28.95	100	28.86	29.60	103	3	62-144	30	
4,4-DDE	<28.78	28.89	30.80	107	28.86	31.14	108	1	78-143	30	
Endosulfan I	<28.78	28.89	<28.89	98	28.86	29.43	102	4	73-129	30	
Dieldrin	<28.78	28.89	29.64	103	28.86	30.25	105	2	72-136	30	
Endrin	<28.78	28.89	31.85	110	28.86	32.23	112	2	82-131	30	
4,4-DDD	<28.78	28.89	33.31	115	28.86	33.38	116	1	70-143	30	
Endosulfan II	<28.78	28.89	33.27	115	28.86	31.85	110	4	75-136	30	
4,4-DDT	<28.78	28.89	34.16	118	28.86	33.74	117	1	78-125	30	
Endrin aldehyde	<28.78	28.89	36.16	125	28.86	35.08	122	2	78-130	30	
Methoxychlor	<28.78	28.89	34.53	120	28.86	33.01	114	5	71-122	30	
Endosulfan sulfate	<28.78	28.89	36.30	126	28.86	33.84	117	7	77-129	30	
Endrin ketone	<28.78	28.89	34.53	120	28.86	33.37	116	3	75-145	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 33246

Lab Batch ID: 83120

Reporting Units: mg/kg

Date Prepared: 06/16/2010
Date Analyzed: 06/17/2010

Client Sample Id: 061010-OP-W2048 S
Sample ID: 10061117-001 S
Method: SW3550 /SW8082

Project ID: N/A
Analyst: 1029
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
PCB-1016	<0.1165	0.5841	0.5631	96	0.5824	0.5629	97	1	52-184	30	

Client Sample Id: 061010-OP-W2048 S
Sample ID: 10061117-001 S
Method: SW3550 /SW8082

Analyst: 1029
Matrix: Soil

Date Prepared: 06/16/2010
Date Analyzed: 06/17/2010

Prep Batch #: 33246

Lab Batch ID: 83121

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
PCB-1016	<0.1165	0.5841	0.5631	96	0.5824	0.5629	97	1	52-184	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 33262

Lab Batch ID: 83127

Reporting Units: ug/kg

Date Prepared: 06/17/2010
Date Analyzed: 06/17/2010

Client Sample Id: Gude-MW1A-SO-14 to 18 S
Sample ID: 10060417-001 S
Method: SW8151A_PREP /SW8151A

Project ID: N/A
Analyst: 1029
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	2,4-D	<116.7	115.8	867.6	75	115.5	856	74	1	57-117	25
2,4,5-TP (Silvex)	<11.67	115.8	88.19	76	115.5	85.08	74	3	59-126	25	
2,4,5-T	<11.67	115.8	104.1	90	115.5	105.4	91	1	66-144	25	
Dimoseb	<58.36	579	426.1	74	577.3	405.7	70	6	63-106	25	

Client Sample Id: Gude-MW1A-SO-14 to 18 S
Sample ID: 10060417-001 S
Method: /SW9014

Analyst: 1022
Matrix: Soil

Date Prepared: 06/15/2010
Date Analyzed: 06/15/2010

Prep Batch #: 83086
Lab Batch ID: 83086
Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Cyanide Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Cyanide, Total	<2.941	5.882	5.200	88	5.882	5.294	90	2	80-120	20

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 33203

Lab Batch ID: 82991

Reporting Units: ug/kg

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

Client Sample Id: 25' NW S

Sample ID: 10061105-002 S

Method: SW5030 /SW8260B

Project ID: N/A

Analyst: 1035

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Parent Sample Result [A]	Spiked Sample Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Dichlorodifluoromethane	<2.874	68.97	66.09	96	68.97	61.75	90	6	26-140	23
Chloromethane	<2.874	68.97	65.23	95	68.97	64.20	93	2	42-126	30	
Vinyl Chloride	<2.874	68.97	76.31	111	68.97	69.95	101	9	34-137	30	
Bromomethane	<2.874	68.97	57.21	83	68.97	55.13	80	4	35-132	20	
Chloroethane	<2.874	68.97	64.22	93	68.97	60.36	88	6	33-133	20	
Acetone	<11.49	68.97	25.87	38	68.97	23.41	34	11	27-177	21	
Trichlorofluoromethane	<2.874	68.97	58.25	84	68.97	61.01	88	5	36-136	30	
1,1-Dichloroethene	<2.874	68.97	61.17	89	68.97	35.94	52	52	38-124	14	F
Methylene chloride	<2.874	68.97	57.31	83	68.97	51.95	75	10	35-129	35	
trans-1,2-Dichloroethene	<2.874	68.97	59.77	87	68.97	61.32	89	2	33-135	20	
1,1-Dichloroethane	<2.874	68.97	59.29	86	68.97	56.00	81	6	45-125	20	
Vinyl acetate	<2.874	68.97	62.06	90	68.97	58.85	85	6	4-128	30	
2-Butanone (MEK)	<11.49	68.97	36.40	53	68.97	35.28	51	4	17-152	30	
cis-1,2-Dichloroethene	<2.874	68.97	246.8	358	68.97	174	252	35	45-122	20	XF
Bromochloromethane	<2.874	68.97	68.67	100	68.97	67.14	97	3	42-127	20	
Chloroform	<2.874	68.97	65.16	94	68.97	61.66	89	5	44-119	20	
2,2-Dichloropropane	<2.874	68.97	61.26	89	68.97	57.05	83	7	34-126	20	
1,1,1-Trichloroethane	<2.874	68.97	67.90	98	68.97	65.16	94	4	40-132	20	
1,2-Dichloroethane	<2.874	68.97	64.69	94	68.97	61.77	90	4	30-132	20	
1,1-Dichloropropene	<2.874	68.97	68.52	99	68.97	64.51	94	5	29-132	20	
Carbon tetrachloride	<2.874	68.97	66.01	96	68.97	63.06	91	5	30-138	20	
Benzene	<2.874	68.97	65.97	96	68.97	61.93	90	6	35-126	11	
Dibromomethane	<2.874	68.97	67.07	97	68.97	64.86	94	3	37-129	23	
1,2-Dichloropropane	<2.874	68.97	64.69	94	68.97	60.75	88	7	41-117	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 82991

Lab Batch ID: 82991

Reporting Units: ug/kg

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

Client Sample Id:

Sample ID: 10061105-002 S

Method: SW5030 /SW8260B

Project ID: N/A

Analyst: 1035

Matrix: Soil

TCL Volatile Organic Compounds	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon Disulfide	<5.747	68.97	54.17	79	68.97	48.00	70	12	11-147	24	
Trichloroethene	<2.874	68.97	87.31	127	68.97	75.84	110	14	33-132	14	
Acrylonitrile	<11.49	68.97	68.99	100	68.97	66.45	96	4	22-149	14	
Bromodichloromethane	<2.874	68.97	64.80	94	68.97	60.98	88	7	34-127	20	
cis-1,3-Dichloropropene	<2.874	68.97	65.94	96	68.97	61.05	89	8	22-122	20	
4-Methyl-2-Pentanone (MIBK)	<11.49	68.97	54.46	79	68.97	54.29	79	0	13-137	25	
trans-1,3-Dichloropropene	<2.874	68.97	64.77	94	68.97	61.63	89	5	25-118	20	
1,1,2-Trichloroethane	<2.874	68.97	67.05	97	68.97	65.07	94	3	32-132	20	
Toluene	<2.874	68.97	65.62	95	68.97	63.18	92	3	27-129	13	
1,3-Dichloropropane	<2.874	68.97	65.78	95	68.97	61.21	89	7	30-130	20	
2-Hexanone (MBK)	<11.49	68.97	37.99	55	68.97	37.72	55	0	4-120	21	
1,2-Dibromoethane	<2.874	68.97	69.86	101	68.97	67.03	97	4	35-132	20	
Dibromochloromethane	<2.874	68.97	66.69	97	68.97	63.05	91	6	30-130	20	
Acrolein	<11.49	68.97	69.45	101	68.97	66.97	97	4	12-153	20	
1,1,1,2-Tetrachloroethane	<2.874	68.97	65.48	95	68.97	61.92	90	5	37-126	20	
Bromoform	<2.874	68.97	67.30	98	68.97	65.21	95	3	19-125	20	
trans-1,4-dichloro-2-butene	<2.874	68.97	65.48	95	68.97	60.80	88	8	2-122	20	
Tetrachloroethene	<2.874	68.97	67.17	97	68.97	65.30	95	2	22-141	20	
Chlorobenzene	<2.874	68.97	63.60	92	68.97	61.45	89	3	25-127	13	
Ethylbenzene	<2.874	68.97	68.06	99	68.97	63.15	92	7	18-133	30	
m&p-Xylene	<5.747	137.9	133.3	97	137.9	126.6	92	5	18-134	20	
Styrene	<2.874	68.97	66.60	97	68.97	62.57	91	6	17-122	51	
1,1,2,2-Tetrachloroethane	<2.874	68.97	68.32	99	68.97	62.49	91	8	34-130	31	
o-Xylene	<2.874	68.97	67.06	97	68.97	63.55	92	5	16-139	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #:
 Lab Batch ID: 82991
 Reporting Units: ug/kg

Date Prepared: 06/11/2010
 Date Analyzed: 06/11/2010

Client Sample Id:
 Sample ID: 10061105-002 S
 Method: SW5030 /SW8260B

Project ID: N/A
 Analyst: 1035
 Matrix: Soil

TCL Volatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	1,2,3-Trichloropropane	<2.874	68.97	70.06	102	68.97	64.59	94	8	23-134	20
1,3-Dichlorobenzene	<2.874	68.97	64.02	93	68.97	61.02	88	6	21-123	20	
1,4-Dichlorobenzene	<2.874	68.97	62.40	90	68.97	59.48	86	5	29-115	20	
1,2-Dichlorobenzene	<2.874	68.97	63.99	93	68.97	60.70	88	6	20-126	20	
1,2-Dibromo-3-chloropropane	<22.99	68.97	76.07	110	68.97	71.82	104	6	33-125	28	
1,2,4-Trichlorobenzene	<2.874	68.97	66.74	97	68.97	63.02	91	6	12-108	20	
Iodomethane	<11.49	68.97	52.70	76	68.97	55.69	81	6	22-131	25	
Naphthalene	<2.874	68.97	78.05	113	68.97	76.24	111	2	36-155	20	
1,2,3-Trichlorobenzene	<2.874	68.97	67.79	98	68.97	65.76	95	3	5-111	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
 6630 Baltimore National Pike
 Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 33232

Lab Batch ID: 83102

Reporting Units: ug/kg

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Client Sample Id: Guide-MW2B-SO-14 to 16 S

Sample ID: 10061007-002 S

Method: SW3550 /SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TCL Semivolatile Organic Compounds	Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Acenaphthene	<95.63	1528	1461	96	1531	1457	95	1	52-128	30	
	Acenaphthylene	<95.63	1528	1513	99	1531	1520	99	0	59-119	30	
	Acetophenone	<95.63	1528	1507	99	1531	1483	97	2	53-115	30	
	Anthracene	<95.63	1528	1566	102	1531	1544	101	1	51-137	30	
	Benzo(a)anthracene	<95.63	1528	1707	112	1531	1646	108	4	45-163	30	
	Benzo(a)pyrene	<95.63	1528	1635	107	1531	1580	103	4	52-164	30	
	Benzo(b)fluoranthene	<95.63	1528	1816	119	1531	1790	117	2	58-154	30	
	Benzo(g,h,i)perylene	<95.63	1528	1770	116	1531	1811	118	2	37-144	30	
	Benzo(k)fluoranthene	<95.63	1528	1696	111	1531	1541	101	9	49-160	30	
	Benzyl Butyl Phthalate	<95.63	1528	1553	102	1531	1550	101	1	40-179	30	
	bis(2-chloroethoxy) methane	<95.63	1528	1413	92	1531	1401	92	0	53-120	30	
	bis(2-chloroethyl) ether	<95.63	1528	1400	92	1531	1409	92	0	47-116	30	
	bis(2-chloroisopropyl) ether	<95.63	1528	1320	86	1531	1317	86	0	45-112	30	
	bis(2-ethylhexyl) phthalate	<95.63	1528	1482	97	1531	1491	97	0	43-172	30	
	4-Bromophenylphenyl ether	<95.63	1528	1550	101	1531	1550	101	0	44-159	30	
	di-n-Butyl Phthalate	<191.3	1528	1616	106	1531	1611	105	1	54-131	30	
	4-Chloro-3-methylphenol	<95.63	1528	1617	106	1531	1574	103	3	57-130	30	
	4-Chloroaniline	<191.3	1528	1559	102	1531	1535	100	2	50-122	30	
	2-Chloronaphthalene	<95.63	1528	1467	96	1531	1460	95	1	50-124	30	
	2-Chlorophenol	<95.63	1528	1485	97	1531	1489	97	0	54-119	30	
	4-Chlorophenyl Phenyl Ether	<95.63	1528	1536	101	1531	1512	99	2	57-133	30	
	Chrysene	<95.63	1528	1662	109	1531	1613	105	4	42-165	30	
	Dibenz(a,h)Anthracene	<95.63	1528	1820	119	1531	1847	121	2	37-140	30	
	Dibenzofuran	<95.63	1528	1528	100	1531	1508	98	2	44-138	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 83102

Lab Batch ID: 83102

Reporting Units: ug/kg

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Client Sample Id:

Sample ID: 10061007-002 S

Method: SW3550/SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

TCL Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
3,3-Dichlorobenzidine	<95.63	1528	1701	111	1531	1719	112	1	11-140	30	
2,4-Dichlorophenol	<95.63	1528	1546	101	1531	1536	100	1	56-131	30	
Diethyl Phthalate	<95.63	1528	1578	103	1531	1545	101	2	51-126	30	
Dimethyl phthalate	<95.63	1528	1550	101	1531	1544	101	0	56-120	30	
2,4-Dimethylphenol	<95.63	1528	1091	71	1531	1294	85	18	49-124	30	
4,6-dinitro-2-methyl phenol	<95.63	1528	2148	141	1531	2058	134	5	1-187	30	
2,4-Dinitrophenol	<191.3	1528	2214	145	1531	2038	133	9	4-200	30	
2,4-Dinitrotoluene	<95.63	1528	1750	115	1531	1661	108	6	57-138	30	
2,6-Dinitrotoluene, 2,6-DNT	<95.63	1528	1725	113	1531	1688	110	3	61-136	30	
Fluoranthene	<95.63	1528	1720	113	1531	1618	106	6	40-155	30	
Fluorene	<95.63	1528	1533	100	1531	1516	99	1	55-128	30	
Hexachlorobenzene	<95.63	1528	1456	95	1531	1478	97	2	52-129	30	
Hexachlorobutadiene	<95.63	1528	1471	96	1531	1454	95	1	50-128	30	
Hexachlorocyclopentadiene	<95.63	1528	1779	116	1531	1709	112	4	13-144	30	
Hexachloroethane	<95.63	1528	1466	96	1531	1503	98	2	42-117	30	
Indeno(1,2,3-c,d)Pylene	<95.63	1528	1891	124	1531	1946	127	2	48-135	30	
Isophorone	<95.63	1528	1460	96	1531	1447	95	1	51-114	30	
2-Methylnaphthalene	<95.63	1528	1447	95	1531	1447	95	0	49-130	30	
2-Methylphenol	<95.63	1528	1497	98	1531	1494	98	0	54-119	30	
3&4-Methylphenol	<95.63	1528	1521	100	1531	1534	100	0	50-115	30	
4-Nitroaniline	<95.63	1528	1846	121	1531	1680	110	10	50-133	30	
3-Nitroaniline	<95.63	1528	1691	111	1531	1608	105	6	49-133	30	
2-Nitroaniline	<191.3	1528	1776	116	1531	1719	112	4	53-133	30	
Nitrobenzene	<95.63	1528	1444	95	1531	1452	95	0	48-113	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10060417

Prep Batch #: 83102

Date Prepared: 06/15/2010
Date Analyzed: 06/15/2010

Client Sample Id:

Sample ID: 10061007-002 S
Method: SW3550 /SW8270C

Project ID: N/A

Analyst: 1040
Matrix: Soil

Reporting Units: ug/kg

TCL Semivolatile Organic Compounds		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
2-Nitrophenol		<95.63	1528	1669	109	1531	1688	110	1	56-136	30	
4-Nitrophenol		<95.63	1528	1751	115	1531	1581	103	11	47-135	30	
N-Nitrosodimethylamine		<95.63	1528	1488	97	1531	1490	97	0	45-122	25	
N-Nitrosodi-n-Propylamine		<95.63	1528	1464	96	1531	1441	94	2	44-113	30	
N-Nitrosodiphenylamine		<95.63	1528	1458	95	1531	1490	97	2	57-124	30	
di-n-Octyl Phthalate		<95.63	1528	1516	99	1531	1463	96	3	25-185	30	
1,2,4,5-Tetrachlorobenzene		<95.63	1528	1514	99	1531	1492	97	2	51-131	30	
Pentachlorophenol		<191.3	1528	1726	113	1531	1627	106	6	34-154	30	
Phenanthrene		<95.63	1528	1504	98	1531	1487	97	1	46-141	30	
Phenol		<95.63	1528	1364	89	1531	1365	89	0	47-103	30	
Pyrene		<95.63	1528	1541	101	1531	1505	98	3	24-181	30	
2,3,4,6-Tetrachlorophenol		<95.63	1528	1622	106	1531	1547	101	5	49-141	30	
2,4,6-Trichlorophenol		<95.63	1528	1678	110	1531	1662	109	1	59-133	30	
2,4,5-Trichlorophenol		<95.63	1528	1705	112	1531	1693	111	1	61-138	30	

Matrix Spike Percent Recovery |DI| = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery |GI| = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

ANALYTICAL REPORT

REVISED

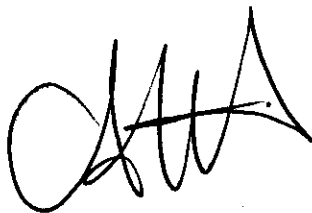
Phase Sep Science East Station

Lot #: COF110493 - A

John Slowikowski

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.



Christina M. Kovitch
Project Manager

June 25, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture Arkansas	(#P330-10-00139) (#88-0690)	Foreign Soil Import Permit	X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002319)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203010)	WW –	X –
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pittsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0F110493-A

Sample Receiving:

TestAmerica Pittsburgh received samples on June 11, 2010. The cooler was received within the proper temperature range.

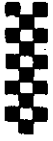
If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

OPP's:

All compounds <20% RSD will use an average response factor curve if no visible improvement is accomplished using a curve. A curve will be used for a compound where it is determined to be the "best-fit" evaluation.

General Chemistry:

There were no problems associated with the analysis.



REVISED -40

Chain of Custody Form for Subcontracted Analyses

8-2003-06-10

Phase Separation Science, Inc
6630 Baltimore National Pike
Beltsville, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Crownsville, MD 21228
Contact: Kim Ives
Phone: 410-869-0883

W.O. No.: 10861M17
P.O. No.:
Project Name: Grade Landfill
Project Number: NA

For Questions or Issues please contact: John Slawinski

Report Due On: 07/01/10 05:00

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analysis Required	Method	Type of Container	Preservative
10861M17-001	026-MWTA-0034 to B	06/07/10	1630	SOLID	Organophosphorus Compounds	SW816A	4 OZ WM GLASS	COOL

Data Deliverables Required: Results and Copy of COC

Perform Q.C. on Sample:

Send Report Attn: BETSY ORR

Alert No: _____ Carrier: TEST AMERICA COURIER
Condition Upon Receipt: _____
Comments: _____

Samples Requisitioned By: _____ Date: _____ Time: _____ Samples Received By: _____
Samples Requisitioned By: _____ Date: _____ Time: _____ Samples Received By: _____
Samples Requisitioned By: _____ Date: 6/11/10 Time: 10:30 Samples Received By: _____

Sub-Contractor: Test America Method: SW816A Matrix: SOLID
Analyte Name: Parathion, Ethyl
Fenitrothion, Methyl
Diazinon
Fenprophos
Dinoseb
Phosalone
ZINOPHOS

METHODS SUMMARY

COF110493

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Organophosphorous Compounds by GC	SW846 8141A	SW846 3541
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

COF110493

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L2RN8	001	10060417-001	06/03/10	16:00

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10060417-001

GC Semivolatiles

Lot-Sample #....: C0F110493-001 Work Order #....: L2RN81AA Matrix.....: SOLID
Date Sampled....: 06/03/10 Date Received...: 06/11/10 MS Run #.....: 0164019
Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
Prep Batch #....: 0164044 Analysis Time...: 04:26
Dilution Factor: 1
% Moisture.....: 15 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Phorate	ND	39	ug/kg
Disulfoton	ND	39	ug/kg
Methyl parathion	ND	39	ug/kg
Famphur	ND	39	ug/kg
Dimethoate	ND	39	ug/kg
Parathion	ND	39	ug/kg
Thionazin	ND	39	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	103	(47 - 130)	
Tributyl phosphate	100	(55 - 125)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: C0F110493 Work Order #...: L2VHE1AA Matrix.....: SOLID
 MB Lot-Sample #: C0F130000-044
 Analysis Date...: 06/24/10 Prep Date.....: 06/14/10 Analysis Time...: 06:40
 Dilution Factor: 1 Prep Batch #...: 0164044

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Phorate	ND	33	ug/kg	SW846 8141A
Disulfoton	ND	33	ug/kg	SW846 8141A
Methyl parathion	ND	33	ug/kg	SW846 8141A
Famphur	ND	33	ug/kg	SW846 8141A
Dimethoate	ND	33	ug/kg	SW846 8141A
Thionazin	ND	33	ug/kg	SW846 8141A
Parathion	ND	33	ug/kg	SW846 8141A

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Triphenyl phosphate	92	(47 - 130)
Tributyl phosphate	84	(55 - 125)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F110493 Work Order #...: L2VHE1AC Matrix.....: SOLID
 LCS Lot-Sample#: C0F130000-044
 Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0164044 Analysis Time...: 07:06
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Phorate	117	(41 - 143)	SW846 8141A
Disulfoton	116	(31 - 136)	SW846 8141A
Methyl parathion	122	(43 - 146)	SW846 8141A
Famphur	129	(54 - 137)	SW846 8141A
Dimethoate	109	(40 - 143)	SW846 8141A
Thionazin	122	(48 - 126)	SW846 8141A
Parathion	123	(52 - 133)	SW846 8141A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Triphenyl phosphate	106	(47 - 130)
Tributyl phosphate	115	(55 - 125)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F110493 Work Order #...: L2RN81AD-MS Matrix.....: SOLID
 MS Lot-Sample #: C0F110493-001 L2RN81AE-MSD
 Date Sampled...: 06/03/10 Date Received...: 06/11/10 MS Run #.....: 0164019
 Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0164044 Analysis Time...: 04:53
 Dilution Factor: 1 % Moisture.....: 15

PARAMETER	PERCENT	RECOVERY	RPD		METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
Phorate	94	(41 - 143)			SW846 8141A
	95	(41 - 143)	1.1	(0-30)	SW846 8141A
Disulfoton	93	(31 - 136)			SW846 8141A
	95	(31 - 136)	2.8	(0-30)	SW846 8141A
Methyl parathion	120	(43 - 146)			SW846 8141A
	121	(43 - 146)	0.79	(0-30)	SW846 8141A
Famphur	107	(54 - 137)			SW846 8141A
	109	(54 - 137)	2.1	(0-30)	SW846 8141A
Dimethoate	101	(40 - 143)			SW846 8141A
	102	(40 - 143)	1.2	(0-30)	SW846 8141A
Thionazin	102	(48 - 126)			SW846 8141A
	104	(48 - 126)	1.9	(0-27)	SW846 8141A
Parathion	118	(52 - 133)			SW846 8141A
	120	(52 - 133)	0.93	(0-30)	SW846 8141A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Triphenyl phosphate	93	(47 - 130)
	95	(47 - 130)
Tributyl phosphate	96	(55 - 125)
	96	(55 - 125)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters
 Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10060417-001

General Chemistry

Lot-Sample #...: C0F110493-001 Work Order #...: L2RN8 Matrix.....: SOLID
Date Sampled...: 06/03/10 Date Received...: 06/11/10
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	85.0	1.0	%	SM20 2540G	06/13-06/14/10	0163039
		Dilution Factor: 1		Analysis Time...: 08:00	MS Run #.....: 0163028	

ANALYTICAL REPORT

PROJECT NO. 10060417

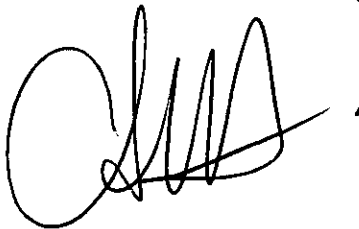
Phase Sep Science East Station

Lot #: COH260601

Betsy Orr

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.



Christina M. Kovitch
Project Manager

September 1, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW	X
US Dept of Agriculture	(#P330-10-00139)	HW	
Arkansas	(#88-0690)	Foreign Soil Import Permit	X
California – NELAC	04224CA	WW	X
Connecticut	(#PH-0688)	HW	X
Florida – NELAC	(#E871008)	WW	X
Illinois – NELAC	(#002319)	HW	X
Kansas – NELAC	(#E-10350)	WW	X
Louisiana – NELAC	(#04041)	HW	X
New Hampshire – NELAC	(#203010)	WW	X
New Jersey – NELAC	(PA-005)	--	--
New York – NELAC	(#11182)	WW	X
North Carolina	(#434)	HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
South Carolina	(#89014002)	HW	X
Utah – NELAC	(STLP)	WW	X
West Virginia	(#142)	HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pittsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0H260601

Sample Receiving:

TestAmerica Pittsburgh received samples on June 11, 2010. The cooler was received within the proper temperature range.

This is a re-log of Lot # C0F110493. The client requested that sample 1006417-001 be re-logged for sulfide analysis. The client is aware that this sample will be analyzed outside of holding time.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

General Chemistry:

There were no problems associated with the analysis.



REVISED

Chain of Custody Form for Subcontracted Analyses

Page 2 of 2-10

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Catonsville, MD 21228
Contact: Ken Ives
Phone: 410-869-0085

W.O. No.: 10060417
P.O. No.:
Project Name: Guide Landfill
Project Number: N/A

For Questions or issues please contact: John Slowikowski

Report Due On : 07/01/10 05:00

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
10060417-001	Guide-MW/1A-SO-14 to 18	06/07/10	16:00	SOLID	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL

Data Deliverables Required: Results and Copy of COC

Perform Q.C. on Sample:

Send Report Attn: BETSY ORR

Airbill No.: _____ Carrier: TEST AMERICA COURIER
Condition Upon Receipt: _____
Comments: _____

Samples Relinquished By: _____ Date: _____ Time: _____ Samples Received By: _____
Samples Relinquished By: _____ Date: _____ Time: _____ Samples Received By: _____
Samples Relinquished By: _____ Date: 6/11/10 Time: 10:31 Samples Received By: [Signature]

Sub-Contractor: Test America Method: SW8141A Matrix: SOLID Analyte Name: Parathion, Ethyl
Test America Method: SW8141A Matrix: SOLID Analyte Name: Parathion, Methyl
Test America Method: SW8141A Matrix: SOLID Analyte Name: Disulfoton
Test America Method: SW8141A Matrix: SOLID Analyte Name: Famphar
Test America Method: SW8141A Matrix: SOLID Analyte Name: Dimethoate
Test America Method: SW8141A Matrix: SOLID Analyte Name: Phorate
Test America Method: SW8141A Matrix: SOLID Analyte Name: ZINOPHOS

METHODS SUMMARY

C0H260601

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C0H260601

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L569L	001	1006417-001	06/03/10	16:00

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filler test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 1006417-001

General Chemistry

Lot-Sample #...: C0H260601-001 Work Order #...: L569L Matrix.....: SOLID
Date Sampled...: 06/03/10 Date Received..: 06/11/10
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	85.0	1.0	%	SM20 2540G	06/13-06/14/10	0239021
			Dilution Factor: 1	Analysis Time..: 00:00	MS Run #.....:	
Total Sulfide	ND	35.3	mg/kg	SW846 9030B/9034	08/31/10	0243191
			Dilution Factor: 1	Analysis Time..: 14:35	MS Run #.....:	0243130

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H260601

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Sulfide	ND	Work Order #: L6CC21AA 30.0	mg/kg	MB Lot-Sample #: SW846 9030B/9034	C0H310000-191 08/31/10	0243191
		Dilution Factor: 1				
		Analysis Time..: 14:35				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H260601

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide	102	(85 - 115)	SW846 9030B/9034	08/31/10	0243191
		Dilution Factor: 1		Analysis Time.: 14:35	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H260601

Matrix.....: SOLID

Date Sampled...: 08/25/10

Date Received...: 08/26/10

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide							
	85	(75 - 125)			SW846 9030B/9034	08/31/10	0243191
	86	(75 - 125)	1.1	(0-20)	SW846 9030B/9034	08/31/10	0243191
					Dilution Factor: 1		
					Analysis Time...: 14:35		
					MS Run #.....: 0243130		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

Analytical Report for

EA Engineering

Certificate of Analysis No.: 10061007

Project Manager: Pete Lekas

Project Name : Gude

Project Location: Rockville, MD



July 14, 2010

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL
PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047

PHASE SEPARATION SCIENCE, INC.



July 14, 2010

Pete Lekas
EA Engineering
15 Loveton Circle
Sparks, MD 21152

Reference: PSS Work Order No: **10061007**
Project Name : Gude
Project Location: Rockville, MD

Dear Pete Lekas :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **10061007**.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on August 9, 2010. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

A handwritten signature in black ink that reads 'Dan Prucnal'.

Dan Prucnal
Laboratory Manager



Case Narrative Summary
Client Name: EA Engineering
Project Name: Gude

Project ID: N/A

Work Order Number: 10061007

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/10/2010 at 12:11 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
10061007-001	Gude-MW2A-SO-12 to 14	SOIL	06/08/2010 10:30
10061007-002	Gude-MW2B-SO-14 to 16	SOIL	06/09/2010 14:30

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in the Sample Receipt Checklist.

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Narrative Comments:

Pesticide matrix spike duplicate spiked at incorrect concentration.
Revised Version 1.002 reflects changes to Volatile, Semivolatile, and Herbicides reporting compounds.

Notes:

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
 - C Results Pending Final Confirmation.
 - D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
 - E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
 - Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
 - J The target analyte was positively identified below the reporting limit but greater than one-half of the reporting limit.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect.
An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
 - RL PSS Reporting Limit.
 - U Not detected.

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 Date/Time Sampled: 06/08/2010 10:30 PSS Sample ID: 10061007-001
 Matrix: SOIL Date/Time Received: 06/10/2010 12:11 % Solids: 83

Total Metals

Analytical Method: SW846 6020A

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Arsenic	3.0	mg/kg	0.5		1	0.3	06/14/10	06/16/10 15:40	1033
Barium	29	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Beryllium	ND	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Cadmium	ND	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Chromium	32	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Cobalt	5.4	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Copper	15	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Lead	21	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Mercury	ND	mg/kg	0.10		1	0.05	06/14/10	06/16/10 15:40	1033
Nickel	12	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Selenium	ND	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Silver	ND	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Thallium	ND	mg/kg	2.1		1	1	06/14/10	06/16/10 15:40	1033
Tin	ND	mg/kg	5.2		1	2.6	06/14/10	06/16/10 15:40	1033
Vanadium	24	mg/kg	2.6		1	1.3	06/14/10	06/16/10 15:40	1033
Zinc	11	mg/kg	10		1	5.2	06/14/10	06/16/10 15:40	1033

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 Date/Time Sampled: 06/08/2010 10:30 PSS Sample ID: 10061007-001
 Matrix: SOIL Date/Time Received: 06/10/2010 12:11 % Solids: 83

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
beta-BHC	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
delta-BHC	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Heptachlor	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Aldrin	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
gamma-Chlordane	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
alpha-Chlordane	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
4,4-DDE	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Endosulfan I	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Dieldrin	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Endrin	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
4,4-DDD	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Endosulfan II	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
4,4-DDT	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Endrin aldehyde	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Methoxychlor	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Endrin ketone	ND	ug/kg	24		1	12	06/21/10	06/22/10 13:49	1029
Toxaphene	ND	ug/kg	240		1	120	06/21/10	06/22/10 13:49	1029
Chlordane	ND	ug/kg	240		1	120	06/21/10	06/22/10 13:49	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 12:16	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	240		1	120	06/17/10	06/17/10 20:31	1029
2,4,5-TP (Silvex)	ND	ug/kg	24		1	12	06/17/10	06/17/10 20:31	1029
2,4,5-T	ND	ug/kg	24		1	12	06/17/10	06/17/10 20:31	1029
Dinoseb	ND	ug/kg	120		1	59	06/17/10	06/17/10 20:31	1029

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 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Chloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Vinyl Chloride	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Bromomethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Chloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Acetone	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Methylene chloride	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Vinyl acetate	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
2-Butanone (MEK)	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Bromochloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Chloroform	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Benzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Dibromomethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Carbon Disulfide	ND	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035
Trichloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Acrylonitrile	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035
Bromodichloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Toluene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
2-Hexanone (MBK)	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Dibromochloromethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Acrolein	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Bromoform	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Tetrachloroethene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Chlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Ethylbenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
m&p-Xylene	ND	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035
Styrene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
o-Xylene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	44		1	22	06/11/10	06/11/10 14:31	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Iodomethane	ND	ug/kg	22		1	11	06/11/10	06/11/10 14:31	1035
Naphthalene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.7	06/11/10	06/11/10 14:31	1035
Naphthalene, 1,2,3,4-tetrahydro-1, (TIC)	7	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035
Dodecane (TIC)	10	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035
Naphthalene, 1,2,3,4-tetrahydro-6- (TIC)	6	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035

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CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Decane, 3,6-dimethyl- (TIC)	7	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035
Tridecane (TIC)	14	ug/kg	11		1	5.4	06/11/10	06/11/10 14:31	1035

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 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
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REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Acenaphthylene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Acetophenone	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Anthracene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Benzo(a)anthracene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Benzo(a)pyrene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Benzo(b)fluoranthene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Benzo(g,h,i)perylene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Benzo(k)fluoranthene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Benzyl butyl phthalate	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
bis(2-chloroethyl) ether	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
4-Bromophenylphenyl ether	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Di-n-butyl phthalate	ND	ug/kg	400		1	200	06/15/10	06/15/10 23:22	1040
4-Chloro-3-methylphenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
4-Chloroaniline	ND	ug/kg	400		1	200	06/15/10	06/15/10 23:22	1040
2-Chloronaphthalene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2-Chlorophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Chrysene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Dibenz(a,h)anthracene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Dibenzofuran	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
3,3-Dichlorobenzidine	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2,4-Dichlorophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Diethyl phthalate	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Dimethyl phthalate	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2,4-Dimethylphenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040

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CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	400		1	200	06/15/10	06/15/10 23:22	1040
2,4-Dinitrotoluene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2,6-Dinitrotoluene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Fluoranthene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Fluorene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Hexachlorobenzene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Hexachlorobutadiene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Hexachlorocyclopentadiene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Hexachloroethane	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Isophorone	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2-Methylnaphthalene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2-Methylphenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
3&4-Methylphenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
4-Nitroaniline	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
3-Nitroaniline	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2-Nitroaniline	ND	ug/kg	400		1	200	06/15/10	06/15/10 23:22	1040
Nitrobenzene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2-Nitrophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
4-Nitrophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
N-Nitrosodimethylamine	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
N-Nitrosodiphenylamine	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Di-n-octyl phthalate	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Pentachlorophenol	ND	ug/kg	400		1	200	06/15/10	06/15/10 23:22	1040
Phenanthrene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Phenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
Pyrene	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040

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CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2A-SO-12 to 14 **Date/Time Sampled: 06/08/2010 10:30** **PSS Sample ID: 10061007-001**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 83**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2,4,5-Trichlorophenol	ND	ug/kg	200		1	100	06/15/10	06/15/10 23:22	1040
2,6,10,14,18,22-Tetracosahexaene, (TIC)	160	ug/kg	160		1	100	06/15/10	06/15/10 23:22	1040
9-Octadecenamide, (Z)- (TIC)	1,000	ug/kg	160		1	100	06/15/10	06/15/10 23:22	1040
Erucylamide (TIC)	310	ug/kg	160		1	100	06/15/10	06/15/10 23:22	1040
Dibenzylidene 4,4'-biphenylenediam (TIC)	520	ug/kg	160		1	100	06/15/10	06/15/10 23:22	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	06/15/10	06/15/10 00:00	1022

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CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2B-SO-14 to 16 Date/Time Sampled: 06/09/2010 14:30 PSS Sample ID: 10061007-002
 Matrix: SOIL Date/Time Received: 06/10/2010 12:11 % Solids: 87

Total Metals

Analytical Method: SW846 6020A

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Arsenic	1.1	mg/kg	0.6		1	0.3	06/14/10	06/16/10 15:47	1033
Barium	31	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Beryllium	ND	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Cadmium	ND	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Chromium	31	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Cobalt	6.8	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Copper	9.4	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Lead	8.5	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Mercury	ND	mg/kg	0.11		1	0.06	06/14/10	06/16/10 15:47	1033
Nickel	16	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Selenium	ND	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Silver	ND	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Thallium	ND	mg/kg	2.2		1	1.1	06/14/10	06/16/10 15:47	1033
Tin	ND	mg/kg	5.5		1	2.8	06/14/10	06/16/10 15:47	1033
Vanadium	21	mg/kg	2.8		1	1.4	06/14/10	06/16/10 15:47	1033
Zinc	11	mg/kg	11	J	1	5.5	06/14/10	06/16/10 15:47	1033

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Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
gamma-BHC (Lindane)	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
beta-BHC	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
delta-BHC	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Heptachlor	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Aldrin	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Heptachlor epoxide	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
gamma-Chlordane	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
alpha-Chlordane	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
4,4-DDE	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Endosulfan I	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Dieldrin	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Endrin	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
4,4-DDD	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Endosulfan II	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
4,4-DDT	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Endrin aldehyde	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Methoxychlor	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Endosulfan sulfate	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Endrin ketone	ND	ug/kg	22		1	11	06/21/10	06/22/10 14:17	1029
Toxaphene	ND	ug/kg	220		1	110	06/21/10	06/22/10 14:17	1029
Chlordane	ND	ug/kg	220		1	110	06/21/10	06/22/10 14:17	1029

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Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	06/21/10	06/22/10 14:24	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	230		1	110	06/17/10	06/17/10 21:04	1029
2,4,5-TP (Silvex)	ND	ug/kg	23		1	11	06/17/10	06/17/10 21:04	1029
2,4,5-T	ND	ug/kg	23		1	11	06/17/10	06/17/10 21:04	1029
Dinoseb	ND	ug/kg	110		1	57	06/17/10	06/17/10 21:04	1029

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Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Chloromethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Vinyl Chloride	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Bromomethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Chloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Acetone	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Methylene chloride	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Vinyl acetate	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
2-Butanone (MEK)	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Bromochloromethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Chloroform	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Benzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Dibromomethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Carbon Disulfide	ND	ug/kg	10		1	5.2	06/11/10	06/11/10 14:59	1035
Trichloroethene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Acrylonitrile	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035
Bromodichloromethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035

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CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2B-SO-14 to 16 **Date/Time Sampled: 06/09/2010 14:30** **PSS Sample ID: 10061007-002**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 87**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Toluene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
2-Hexanone (MBK)	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Dibromochloromethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Acrolein	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Bromoform	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Tetrachloroethene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Chlorobenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Ethylbenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
m&p-Xylene	ND	ug/kg	10		1	5.2	06/11/10	06/11/10 14:59	1035
Styrene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
o-Xylene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	41		1	21	06/11/10	06/11/10 14:59	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
Iodomethane	ND	ug/kg	21		1	10	06/11/10	06/11/10 14:59	1035
Naphthalene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.6	06/11/10	06/11/10 14:59	1035

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Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2B-SO-14 to 16 **Date/Time Sampled: 06/09/2010 14:30** **PSS Sample ID: 10061007-002**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 87**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Acenaphthylene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Acetophenone	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Anthracene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Benzo(a)anthracene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Benzo(a)pyrene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Benzo(b)fluoranthene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Benzo(g,h,i)perylene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Benzo(k)fluoranthene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Benzyl butyl phthalate	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
bis(2-chloroethoxy) methane	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
bis(2-chloroethyl) ether	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
4-Bromophenylphenyl ether	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Di-n-butyl phthalate	ND	ug/kg	380		1	190	06/15/10	06/15/10 21:53	1040
4-Chloro-3-methylphenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
4-Chloroaniline	ND	ug/kg	380		1	190	06/15/10	06/15/10 21:53	1040
2-Chloronaphthalene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2-Chlorophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Chrysene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Dibenz(a,h)anthracene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Dibenzofuran	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
3,3-Dichlorobenzidine	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2,4-Dichlorophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Diethyl phthalate	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Dimethyl phthalate	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2,4-Dimethylphenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040

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Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	380		1	190	06/15/10	06/15/10 21:53	1040
2,4-Dinitrotoluene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2,6-Dinitrotoluene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Fluoranthene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Fluorene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Hexachlorobenzene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Hexachlorobutadiene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Hexachlorocyclopentadiene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Hexachloroethane	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Isophorone	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2-Methylnaphthalene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2-Methylphenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
3&4-Methylphenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
4-Nitroaniline	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
3-Nitroaniline	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2-Nitroaniline	ND	ug/kg	380		1	190	06/15/10	06/15/10 21:53	1040
Nitrobenzene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2-Nitrophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
4-Nitrophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
N-Nitrosodimethylamine	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
N-Nitrosodiphenylamine	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Di-n-octyl phthalate	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Pentachlorophenol	ND	ug/kg	380		1	190	06/15/10	06/15/10 21:53	1040
Phenanthrene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Phenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
Pyrene	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10061007
 EA Engineering, Sparks, MD
 July 14, 2010

Project Name: Gude
 Project Location: Rockville, MD

REVISED

Sample ID: Gude-MW2B-SO-14 to 16 **Date/Time Sampled: 06/09/2010 14:30** **PSS Sample ID: 10061007-002**
Matrix: SOIL **Date/Time Received: 06/10/2010 12:11** **% Solids: 87**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
2,4,5-Trichlorophenol	ND	ug/kg	190		1	96	06/15/10	06/15/10 21:53	1040
9-Octadecenamide, (Z)- (TIC)	970	ug/kg	150		1	96	06/15/10	06/15/10 21:53	1040
Erucylamide (TIC)	700	ug/kg	150		1	96	06/15/10	06/15/10 21:53	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	2.9		1	1.4	06/15/10	06/15/10 00:00	1022



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

www.phaseonline.com
email: info@phaseonline.com

PHASE SEPARATION SCIENCE, INC.

1 CLIENT: <u>EA Engineering</u> OFFICE LOC: <u>Spark, MD</u>		PSS Work Order #: <u>10061007</u> PAGE <u>1</u> OF <u>1</u>				
PROJECT MGR: <u>Pete Lekas</u> PHONE NO.: <u>(410) 771-4950</u>		Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil WL=Waste Liquid WS=Waste Solid W=Wipe				
EMAIL: <u>plekash@east.com</u> FAX NO.: <u>(410) 771-4204</u>		Preservatives Used:				
PROJECT NAME: <u>Gude</u> PROJECT NO.:		No. CONTAINERS				
SITE LOCATION: <u>Rockville, MD</u> P.O. NO.:		SAMPLE TYPE:				
SAMPLERS: <u>Joseph Sawicki</u>		C = COMP G = GRAB				
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	Analysis Method Required	Remarks
1	Gude-MW2A-50-12 to 14	6/8/10	1030	S	VOC Pesticide Herbicide PCB Organophosphorus Sulfide	
2	Gude-MW2B-50-14 to 16	6/9/10	1430	S	VOC Pesticide Herbicide PCB Organophosphorus Sulfide	
5 Relinquished By: (1) <u>[Signature]</u> Date: <u>6/10/10</u> Time: <u>1211</u> Received By: <u>[Signature]</u>					Requested Turnaround Time: <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Next Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other	
Relinquished By: (2) <u>[Signature]</u> Date: <u>6/10/10</u> Time: <u>1211</u> Received By:					Data Deliverables Required: <u>EDD</u> Ice Present: <u>YES</u> Temp: <u>22</u> Shipping Carrier: <u>CLIENT</u>	
Relinquished By: (3)					Special Instructions:	
Relinquished By: (4)						

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723
 The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.



Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number	10061007	Received By	Rachel Davis
Client Name	EA Engineering	Date Received	06/10/2010 12:11:00 PM
Project Name	Gude	Delivered By	Client
Project Number	N/A	Tracking No	Not Applicable
Disposal Date:	08/09/2010	Logged In By	Rachel Davis

Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seals	Not Applicable	Temp (deg C)	2
Seal Condition	Not Applicable	Temp Blank Present	No

Documentation

COC agrees with sample labels? Yes or No Sampler Name: Joseph Sawicki
Chain of Custody (COC) Yes or No MD DW Cert. No.: N/A

Sample Container

Appropriate for Specified Analysis? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Custody Seal(s)	Absent
Intact? <input checked="" type="checkbox"/>	Custody Seal(s) Intact?	Not Applicable
Labeled and Labels Legible <input checked="" type="checkbox"/>	Seal(s) Signed / Dated	Not Applicable
Total No. of Samples Received 2	Total No. of Containers Received	16

Preservation

	Yes	No	N/A
Metals (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cyanides (pH>12)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sulfide (pH>9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOC, COD, Phenols (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOX, TKN, NH3, Total Phos (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOC, BTEX (VOA Vials Rcvd Preserved) (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do VOA vials have zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling.

Samples Inspected/Checklist Completed By: R. Davis

Date: 6/10/10

PM Review and Approval: [Signature]

Date: 6/11/10

Analytical Data Package Information Summary for W.O 10061007

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
AD2216A	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1041	S	83021	83021	06/08/2010	06/10/2010	06/14/2010	06/14/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1041	S	83021	83021	06/09/2010	06/10/2010	06/14/2010	06/14/2010
	33220-1-BKS	BKS	33220-1-BKS	1033	S	33220	83077	-----	06/10/2010	06/14/2010	06/16/2010
	33220-1-BLK	BLK	33220-1-BLK	1033	S	33220	83077	-----	06/10/2010	06/14/2010	06/16/2010
SW846 6020A	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1033	S	33220	83077	06/08/2010	06/10/2010	06/14/2010	06/16/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1033	S	33220	83077	06/09/2010	06/10/2010	06/14/2010	06/16/2010
	TP-4 18" S	MS	10061113-021 S	1033	S	33220	83077	06/10/2010	06/10/2010	06/14/2010	06/16/2010
	TP-4 18" SD	MSD	10061113-021 SD	1033	S	33220	83077	06/10/2010	06/10/2010	06/14/2010	06/16/2010
SW846 8081B	33313-1-BKS	BKS	33313-1-BKS	1029	S	33313	83227	-----	06/10/2010	06/21/2010	06/22/2010
	33313-1-BLK	BLK	33313-1-BLK	1029	S	33313	83227	-----	06/10/2010	06/21/2010	06/22/2010
	33313-1-BSD	BSD	33313-1-BSD	1029	S	33313	83227	-----	06/10/2010	06/21/2010	06/22/2010
	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1029	S	33313	83227	06/08/2010	06/10/2010	06/21/2010	06/22/2010
SW846 8082A	Gude-MW2A-SO-12 to 14 S	MS	10061007-001 S	1029	S	33313	83227	06/08/2010	06/10/2010	06/21/2010	06/22/2010
	Gude-MW2A-SO-12 to 14 SD	MSD	10061007-001 SD	1029	S	33313	83227	06/08/2010	06/10/2010	06/21/2010	06/22/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1029	S	33313	83227	06/09/2010	06/10/2010	06/21/2010	06/22/2010
	33314-1-BKS	BKS	33314-1-BKS	1029	S	33314	83216	-----	06/10/2010	06/21/2010	06/22/2010
SW846 8082A	33314-1-BLK	BLK	33314-1-BLK	1029	S	33314	83216	-----	06/10/2010	06/21/2010	06/22/2010
	33314-1-BSD	BSD	33314-1-BSD	1029	S	33314	83216	-----	06/10/2010	06/21/2010	06/22/2010
	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1029	S	33314	83216	06/08/2010	06/10/2010	06/21/2010	06/22/2010
	Gude-MW2A-SO-12 to 14 S	MS	10061007-001 S	1029	S	33314	83216	06/08/2010	06/10/2010	06/21/2010	06/22/2010
SW846 8082A	Gude-MW2A-SO-12 to 14 SD	MSD	10061007-001 SD	1029	S	33314	83216	06/08/2010	06/10/2010	06/21/2010	06/22/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1029	S	33314	83216	06/09/2010	06/10/2010	06/21/2010	06/22/2010



Analytical Data Package Information Summary for W.O 10061007

Report Prepared For: EA Engineering, Sparks, MD

Project Name: Gude

Project Manager: Pete Lekas

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8082A	16										
SW846 8151A	33262-1-BKS	BKS	33262-1-BKS	1029	S	33262	83127	-----	06/10/2010	06/17/2010	06/17/2010
	33262-1-BLK	BLK	33262-1-BLK	1029	S	33262	83127	-----	06/10/2010	06/17/2010	06/17/2010
	33262-1-BSD	BSD	33262-1-BSD	1029	S	33262	83127	-----	06/10/2010	06/17/2010	06/17/2010
	Gude-MW1A-SO-14 to 18 S	MS	10060417-001 S	1029	S	33262	83127	06/03/2010	06/10/2010	06/17/2010	06/17/2010
SW846 8260B	Gude-MW1A-SO-14 to 18 SD	MSD	10060417-001 SD	1029	S	33262	83127	06/03/2010	06/10/2010	06/17/2010	06/17/2010
	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1029	S	33262	83127	06/08/2010	06/10/2010	06/17/2010	06/17/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1029	S	33262	83127	06/09/2010	06/10/2010	06/17/2010	06/17/2010
	25' NW S	MS	10061105-002 S	1035	S	33203	82991	06/11/2010	06/10/2010	06/11/2010	06/11/2010
SW846 8270C	25' NW SD	MSD	10061105-002 SD	1035	S	33203	82991	06/11/2010	06/10/2010	06/11/2010	06/11/2010
	33203-1-BKS	BKS	33203-1-BKS	1035	S	33203	82991	-----	06/10/2010	06/11/2010	06/11/2010
	33203-1-BLK	BLK	33203-1-BLK	1035	S	33203	82991	-----	06/10/2010	06/11/2010	06/11/2010
	33203-1-BSD	BSD	33203-1-BSD	1035	S	33203	82991	-----	06/10/2010	06/11/2010	06/11/2010
	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1035	S	33203	82991	06/08/2010	06/10/2010	06/11/2010	06/11/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1035	S	33203	82991	06/09/2010	06/10/2010	06/11/2010	06/11/2010
	33232-1-BKS	BKS	33232-1-BKS	1040	S	33232	83102	-----	06/10/2010	06/15/2010	06/15/2010
	33232-1-BLK	BLK	33232-1-BLK	1040	S	33232	83102	-----	06/10/2010	06/15/2010	06/15/2010
SW846 8270C	33232-1-BSD	BSD	33232-1-BSD	1040	S	33232	83102	-----	06/10/2010	06/15/2010	06/15/2010
	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1040	S	33232	83102	06/08/2010	06/10/2010	06/15/2010	06/15/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1040	S	33232	83102	06/09/2010	06/10/2010	06/15/2010	06/15/2010
	Gude-MW2B-SO-14 to 16 S	MS	10061007-002 S	1040	S	33232	83102	06/09/2010	06/10/2010	06/15/2010	06/15/2010
SW846 8270C	Gude-MW2B-SO-14 to 16 SD	MSD	10061007-002 SD	1040	S	33232	83102	06/09/2010	06/10/2010	06/15/2010	06/15/2010

Analytical Data Package Information Summary for W.O 10061007

Report Prepared For: EA Engineering, Sparks, MD

Project Name: Gude

Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 9014	83086-1-BKS	BKS	83086-1-BKS	1022	S	83086	83086	-----	06/10/2010	06/15/2010	06/15/2010
	83086-1-BLK	BLK	83086-1-BLK	1022	S	83086	83086	-----	06/10/2010	06/15/2010	06/15/2010
	Gude-MW1A-SO-14 to 18 S	MS	10060417-001 S	1022	S	83086	83086	06/03/2010	06/10/2010	06/15/2010	06/15/2010
	Gude-MW1A-SO-14 to 18 SD	MSD	10060417-001 SD	1022	S	83086	83086	06/03/2010	06/10/2010	06/15/2010	06/15/2010
	Gude-MW2A-SO-12 to 14	Initial	10061007-001	1022	S	83086	83086	06/08/2010	06/10/2010	06/15/2010	06/15/2010
	Gude-MW2B-SO-14 to 16	Initial	10061007-002	1022	S	83086	83086	06/09/2010	06/10/2010	06/15/2010	06/15/2010



Blank Summary 10061007

EA Engineering, Sparks, MD

Gude

Sample Id: 33220-1-BLK

Matrix: SOLID

Lab Sample Id: 33220-1-BLK

Analytical Method: SW846 6020A

Prep Method: SW3050B

Date Analyzed: Jun-16-10 11:56

Analyst: 1033

Date Prep: Jun-14-10 14:06

Tech: 1033

Seq Number: 83077

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	2.5	1.3	mg/kg	U	1
Arsenic	7440-38-2	ND	0.5	0.3	mg/kg	U	1
Barium	7440-39-3	ND	2.5	1.3	mg/kg	U	1
Beryllium	7440-41-7	ND	2.5	1.3	mg/kg	U	1
Cadmium	7440-43-9	ND	2.5	1.3	mg/kg	U	1
Chromium	7440-47-3	ND	2.5	1.3	mg/kg	U	1
Cobalt	7440-48-4	ND	2.5	1.3	mg/kg	U	1
Copper	7440-50-8	ND	2.5	1.3	mg/kg	U	1
Lead	7439-92-1	ND	2.5	1.3	mg/kg	U	1
Mercury	7439-97-6	ND	0.10	0.05	mg/kg	U	1
Nickel	7440-02-0	ND	2.5	1.3	mg/kg	U	1
Selenium	7782-49-2	ND	2.5	1.3	mg/kg	U	1
Silver	7440-22-4	ND	2.5	1.3	mg/kg	U	1
Thallium	7440-28-0	ND	2.0	1.0	mg/kg	U	1
Tin	7440-31-5	ND	5.0	2.5	mg/kg	U	1
Vanadium	7440-62-2	ND	2.5	1.3	mg/kg	U	1
Zinc	7440-66-6	ND	10	5.0	mg/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD

Gude

Sample Id: 33313-1-BLK

Matrix: SOLID

Lab Sample Id: 33313-1-BLK

Analytical Method: SW846 8081B

Prep Method: SW3550

Date Analyzed: Jun-22-10 11:29

Analyst: 1029

Date Prep: Jun-21-10 17:45

Tech: 1016

Seq Number: 83227

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
alpha-BHC	319-84-6	ND	20	9.9	ug/kg	U	1
gamma-BHC (Lindane)	58-89-9	ND	20	9.9	ug/kg	U	1
beta-BHC	319-85-7	ND	20	9.9	ug/kg	U	1
delta-BHC	319-86-8	ND	20	9.9	ug/kg	U	1
Heptachlor	76-44-8	ND	20	9.9	ug/kg	U	1
Aldrin	309-00-2	ND	20	9.9	ug/kg	U	1
Heptachlor epoxide	1024-57-3	ND	20	9.9	ug/kg	U	1
gamma-Chlordane	5103-74-2	ND	20	9.9	ug/kg	U	1
alpha-Chlordane	5103-71-9	ND	20	9.9	ug/kg	U	1
4,4-DDE	72-55-9	ND	20	9.9	ug/kg	U	1
Endosulfan I	959-98-8	ND	20	9.9	ug/kg	U	1
Dieldrin	60-57-1	ND	20	9.9	ug/kg	U	1
Endrin	72-20-8	ND	20	9.9	ug/kg	U	1
4,4-DDD	72-54-8	ND	20	9.9	ug/kg	U	1
Endosulfan II	33213-65-9	ND	20	9.9	ug/kg	U	1
4,4-DDT	50-29-3	ND	20	9.9	ug/kg	U	1
Endrin aldehyde	7421-93-4	ND	20	9.9	ug/kg	U	1
Methoxychlor	72-43-5	ND	20	9.9	ug/kg	U	1
Endosulfan sulfate	1031-07-8	ND	20	9.9	ug/kg	U	1
Endrin ketone	53494-70-5	ND	20	9.9	ug/kg	U	1
Toxaphene	8001-35-2	ND	200	99	ug/kg	U	1
Chlordane	57-74-9	ND	200	99	ug/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD
Gude

Sample Id: **33314-1-BLK** Matrix: **SOLID**
Lab Sample Id: **33314-1-BLK**

Analytical Method: **SW846 8082A** Prep Method: **SW3550**
Date Analyzed: **Jun-22-10 09:50** Analyst: **1029** Date Prep: **Jun-21-10 18:00** Tech: **1016**
Seq Number: **83216**

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
PCB-1016	12674-11-2	ND	0.1	0.0	mg/kg	U	1
PCB-1221	11104-28-2	ND	0.1	0.0	mg/kg	U	1
PCB-1232	11141-16-5	ND	0.1	0.0	mg/kg	U	1
PCB-1242	53469-21-9	ND	0.1	0.0	mg/kg	U	1
PCB-1248	12672-29-6	ND	0.1	0.0	mg/kg	U	1
PCB-1254	11097-69-1	ND	0.1	0.0	mg/kg	U	1
PCB-1260	11096-82-5	ND	0.1	0.0	mg/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD
Gude

Sample Id: **33262-1-BLK** Matrix: **SOLID**
Lab Sample Id: **33262-1-BLK**

Analytical Method: **SW846 8151A** Prep Method: **SW8151A_PREP**
Date Analyzed: Jun-17-10 15:09 Analyst: 1029 Date Prep: Jun-17-10 06:48 Tech: 1028
Seq Number: 83127

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2,4-D	94-75-7	ND	200	100	ug/kg	U	1
2,4,5-TP (Silvex)	93-72-1	ND	20	10	ug/kg	U	1
2,4,5-T	93-76-5	ND	20	10	ug/kg	U	1
Dinoseb	88-85-7	ND	100	50	ug/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD

Gude

Sample Id: 33203-1-BLK

Matrix: SOLID

Lab Sample Id: 33203-1-BLK

Analytical Method: SW846 8260B

Prep Method: SW5030

Date Analyzed: Jun-11-10 12:57

Analyst: 1035

Date Prep: Jun-11-10 09:38

Tech: 1035

Seq Number: 82991

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	ND	5	2.5	ug/kg	U	1
Chloromethane	74-87-3	ND	5	2.5	ug/kg	U	1
Vinyl Chloride	75-01-4	ND	5	2.5	ug/kg	U	1
Bromomethane	74-83-9	ND	5	2.5	ug/kg	U	1
Chloroethane	75-00-3	ND	5	2.5	ug/kg	U	1
Acetone	67-64-1	ND	20	10	ug/kg	U	1
Trichlorofluoromethane	75-69-4	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethene	75-35-4	ND	5	2.5	ug/kg	U	1
Methylene chloride	75-09-2	ND	5	2.5	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethane	75-34-3	ND	5	2.5	ug/kg	U	1
Vinyl acetate	108-05-4	ND	5	2.5	ug/kg	U	1
2-Butanone (MEK)	78-93-3	ND	20	10	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	ND	5	2.5	ug/kg	U	1
Bromochloromethane	74-97-5	ND	5	2.5	ug/kg	U	1
Chloroform	67-66-3	ND	5	2.5	ug/kg	U	1
2,2-Dichloropropane	594-20-7	ND	5	2.5	ug/kg	U	1
1,1,1-Trichloroethane	71-55-6	ND	5	2.5	ug/kg	U	1
1,2-Dichloroethane	107-06-2	ND	5	2.5	ug/kg	U	1
1,1-Dichloropropene	563-58-6	ND	5	2.5	ug/kg	U	1
Carbon tetrachloride	56-23-5	ND	5	2.5	ug/kg	U	1
Benzene	71-43-2	ND	5	2.5	ug/kg	U	1
Dibromomethane	74-95-3	ND	5	2.5	ug/kg	U	1
1,2-Dichloropropane	78-87-5	ND	5	2.5	ug/kg	U	1
Carbon Disulfide	75-15-0	ND	10	5.0	ug/kg	U	1
Trichloroethene	79-01-6	ND	5	2.5	ug/kg	U	1
Acrylonitrile	107-13-1	ND	20	10	ug/kg	U	1
Bromodichloromethane	75-27-4	ND	5	2.5	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	5	2.5	ug/kg	U	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ND	20	10	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	ND	5	2.5	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	ND	5	2.5	ug/kg	U	1
Toluene	108-88-3	ND	5	2.5	ug/kg	U	1
1,3-Dichloropropane	142-28-9	ND	5	2.5	ug/kg	U	1
2-Hexanone (MBK)	591-78-6	ND	20	10	ug/kg	U	1
1,2-Dibromoethane	106-93-4	ND	5	2.5	ug/kg	U	1
Dibromochloromethane	124-48-1	ND	5	2.5	ug/kg	U	1
Acrolein	107-02-8	ND	20	10	ug/kg	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	5	2.5	ug/kg	U	1
Bromoform	75-25-2	ND	5	2.5	ug/kg	U	1
trans-1,4-dichloro-2-butene	110-57-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD

Gude

Sample Id: 33203-1-BLK

Matrix: SOLID

Lab Sample Id: 33203-1-BLK

Analytical Method: SW846 8260B

Prep Method: SW5030

Date Analyzed: Jun-11-10 12:57

Analyst: 1035

Date Prep: Jun-11-10 09:38

Tech: 1035

Seq Number: 82991

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Tetrachloroethene	127-18-4	ND	5	2.5	ug/kg	U	1
Chlorobenzene	108-90-7	ND	5	2.5	ug/kg	U	1
Ethylbenzene	100-41-4	ND	5	2.5	ug/kg	U	1
m&p-Xylene	108-38-3	ND	10	5.0	ug/kg	U	1
Styrene	100-42-5	ND	5	2.5	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	2.5	ug/kg	U	1
o-Xylene	95-47-6	ND	5	2.5	ug/kg	U	1
1,2,3-Trichloropropane	96-18-4	ND	5	2.5	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	ND	5	2.5	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	ND	5	2.5	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	ND	5	2.5	ug/kg	U	1
1,2-Dibromo-3-chloropropane	96-12-8	ND	40	20	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	5	2.5	ug/kg	U	1
Iodomethane	74-88-4	ND	20	10	ug/kg	U	1
Naphthalene	91-20-3	ND	5	2.5	ug/kg	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD

Gude

Sample Id: 33232-1-BLK

Matrix: SOLID

Lab Sample Id: 33232-1-BLK

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jun-15-10 18:23

Analyst: 1040

Date Prep: Jun-15-10 09:46

Tech: 1022

Seq Number: 83102

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Acenaphthene	83-32-9	ND	170	83	ug/kg	U	1
Acenaphthylene	208-96-8	ND	170	83	ug/kg	U	1
Acetophenone	98-86-2	ND	170	83	ug/kg	U	1
Anthracene	120-12-7	ND	170	83	ug/kg	U	1
Benzo(a)anthracene	56-55-3	ND	170	83	ug/kg	U	1
Benzo(a)pyrene	50-32-8	ND	23	23	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	ND	170	83	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	ND	170	83	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	ND	170	83	ug/kg	U	1
Benzyl butyl phthalate	85-68-7	ND	170	83	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	ND	170	83	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	ND	170	83	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	ND	170	83	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	ND	170	83	ug/kg	U	1
4-Bromophenylphenyl ether	101-55-3	ND	170	83	ug/kg	U	1
Di-n-butyl phthalate	84-74-2	ND	330	170	ug/kg	U	1
4-Chloro-3-methylphenol	59-50-7	ND	170	83	ug/kg	U	1
4-Chloroaniline	106-47-8	ND	330	170	ug/kg	U	1
2-Chloronaphthalene	91-58-7	ND	170	83	ug/kg	U	1
2-Chlorophenol	95-57-8	ND	170	83	ug/kg	U	1
4-Chlorophenyl phenyl ether	7005-72-3	ND	170	83	ug/kg	U	1
Chrysene	218-01-9	ND	170	83	ug/kg	U	1
Dibenz(a,h)anthracene	53-70-3	ND	23	23	ug/kg	U	1
Dibenzofuran	132-64-9	ND	170	83	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	ND	170	83	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	ND	170	83	ug/kg	U	1
Diethyl phthalate	84-66-2	ND	170	83	ug/kg	U	1
Dimethyl phthalate	131-11-3	ND	170	83	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	ND	170	83	ug/kg	U	1
4,6-Dinitro-2-methyl phenol	534-52-1	ND	170	83	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	ND	330	170	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	ND	330	83	ug/kg	U	1
2,6-Dinitrotoluene	606-20-2	ND	170	83	ug/kg	U	1
Fluoranthene	206-44-0	ND	170	83	ug/kg	U	1
Fluorene	86-73-7	ND	170	83	ug/kg	U	1
Hexachlorobenzene	118-74-1	ND	330	83	ug/kg	U	1
Hexachlorobutadiene	87-68-3	ND	330	83	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	ND	170	83	ug/kg	U	1
Hexachloroethane	67-72-1	ND	330	83	ug/kg	U	1
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	170	83	ug/kg	U	1
Isophorone	78-59-1	ND	170	83	ug/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD

Gude

Sample Id: 33232-1-BLK

Matrix: SOLID

Lab Sample Id: 33232-1-BLK

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jun-15-10 18:23

Analyst: 1040

Date Prep: Jun-15-10 09:46

Tech: 1022

Seq Number: 83102

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2-Methylnaphthalene	91-57-6	ND	170	83	ug/kg	U	1
2-Methylphenol	95-48-7	ND	330	83	ug/kg	U	1
3&4-Methylphenol		ND	330	83	ug/kg	U	1
4-Nitroaniline	100-01-6	ND	170	83	ug/kg	U	1
3-Nitroaniline	99-09-2	ND	170	83	ug/kg	U	1
2-Nitroaniline	88-74-4	ND	330	170	ug/kg	U	1
Nitrobenzene	98-95-3	ND	330	83	ug/kg	U	1
2-Nitrophenol	88-75-5	ND	170	83	ug/kg	U	1
4-Nitrophenol	100-02-7	ND	170	83	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	ND	170	83	ug/kg	U	1
N-Nitrosodi-n-propylamine	621-64-7	ND	66	33	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	ND	170	83	ug/kg	U	1
Di-n-octyl phthalate	117-84-0	ND	170	83	ug/kg	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	170	83	ug/kg	U	1
Pentachlorophenol	87-86-5	ND	330	170	ug/kg	U	1
Phenanthrene	85-01-8	ND	170	83	ug/kg	U	1
Phenol	108-95-2	ND	170	83	ug/kg	U	1
Pyrene	129-00-0	ND	170	83	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	ND	170	83	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	ND	330	83	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	ND	330	83	ug/kg	U	1



Blank Summary 10061007

EA Engineering, Sparks, MD
Gude

Sample Id: **83086-1-BLK** Matrix: **SOLID**
Lab Sample Id: **83086-1-BLK**

Analytical Method: SW846 9014		Prep Method:					
Date Analyzed: Jun-15-10 00:00		Analyst: 1022		Date Prep:		Tech: 1022	
		Seq Number: 83086					
Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Cyanide, Total	57-12-5	ND	2.5	1.3	mg/kg	U	1



Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83227

Sample: 10061007-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	20.5	25.00	82	55-143	
Tetrachloro-m-xylene	18.1	25.00	72	32-133	

Lab Batch #: 83227

Sample: 10061007-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	24.8	25.00	99	55-143	
Tetrachloro-m-xylene	22.1	25.00	88	32-133	

Lab Batch #: 83227

Sample: 10061007-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	23.9	25.00	96	55-143	
Tetrachloro-m-xylene	17.4	25.00	70	32-133	

Lab Batch #: 83227

Sample: 10061007-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	24.4	25.00	98	55-143	
Tetrachloro-m-xylene	20.3	25.00	81	32-133	

Lab Batch #: 83227

Sample: 33313-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	22.0	25.00	88	55-143	
Tetrachloro-m-xylene	21.6	25.00	86	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83227

Sample: 33313-1-BLK / BLK

Matrix: Solid

Units: ug/kg

Organochlorine Pesticides Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	22.6	25.00	90	55-143	U
Tetrachloro-m-xylene	21.9	25.00	87	32-133	U

Lab Batch #: 83227

Sample: 33313-1-BSD / BSD

Matrix: Solid

Units: ug/kg

Organochlorine Pesticides Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	22.1	25.00	88	55-143	
Tetrachloro-m-xylene	20.6	25.00	82	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = $100 * A / B$

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83216

Sample: 10061007-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	22.2	25.00	89	43-124	
Tetrachloro-m-xylene	18.1	25.00	72	44-97	

Lab Batch #: 83216

Sample: 10061007-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.0	25.00	104	43-124	
Tetrachloro-m-xylene	18.2	25.00	73	44-97	

Lab Batch #: 83216

Sample: 10061007-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	25.5	25.00	102	43-124	
Tetrachloro-m-xylene	14.1	25.00	56	44-97	

Lab Batch #: 83216

Sample: 10061007-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.1	25.00	104	43-124	
Tetrachloro-m-xylene	19.8	25.00	79	44-97	

Lab Batch #: 83216

Sample: 33314-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.2	25.00	105	43-124	
Tetrachloro-m-xylene	20.6	25.00	82	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83216

Sample: 33314-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.5	25.00	94	43-124	U
Tetrachloro-m-xylene	20.6	25.00	82	44-97	U

Lab Batch #: 83216

Sample: 33314-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.8	25.00	95	43-124	
Tetrachloro-m-xylene	19.1	25.00	76	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = $100 * A / B$

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83127

Sample: 10060417-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	58.3	50.00	117	40-165	

Lab Batch #: 83127

Sample: 10060417-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	57.6	50.00	115	40-165	

Lab Batch #: 83127

Sample: 10061007-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	52.4	50.00	105	40-165	

Lab Batch #: 83127

Sample: 10061007-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	61.5	50.00	123	40-165	

Lab Batch #: 83127

Sample: 33262-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	49.9	50.00	100	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83127

Sample: 33262-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	47.4	50.00	95	40-165	

Lab Batch #: 83127

Sample: 33262-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides-2,4D & 2,4,5TP Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	47.6	50.00	95	40-165	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 82991

Sample: 10061007-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	48.9	50.00	98	90-108	
4-Bromofluorobenzene	51.0	50.00	102	79-125	

Lab Batch #: 82991

Sample: 10061007-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	49.2	50.00	98	90-108	
4-Bromofluorobenzene	52.0	50.00	104	79-125	

Lab Batch #: 82991

Sample: 10061105-002 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.6	50.00	103	90-113	
Toluene-D8	48.9	50.00	98	90-108	
4-Bromofluorobenzene	51.0	50.00	102	79-125	

Lab Batch #: 82991

Sample: 10061105-002 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	49.2	50.00	98	90-108	
4-Bromofluorobenzene	49.3	50.00	99	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 82991

Sample: 33203-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.3	50.00	101	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	48.3	50.00	97	79-125	

Lab Batch #: 82991

Sample: 33203-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.8	50.00	102	90-113	
Toluene-D8	49.5	50.00	99	90-108	
4-Bromofluorobenzene	51.7	50.00	103	79-125	

Lab Batch #: 82991

Sample: 33203-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.0	50.00	102	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	47.8	50.00	96	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83102

Sample: 10061007-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2800	3330	84	48-112	
2-Fluorophenol	3450	6660	52	45-107	
Nitrobenzene-d5	2820	3330	85	44-98	
Phenol-d6	5290	6660	79	38-100	
Terphenyl-D14	2990	3330	90	34-165	
2,4,6-Tribromophenol	6020	6660	90	44-104	

Lab Batch #: 83102

Sample: 10061007-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2910	3330	87	48-112	
2-Fluorophenol	3540	6660	53	45-107	
Nitrobenzene-d5	2850	3330	86	44-98	
Phenol-d6	5330	6660	80	38-100	
Terphenyl-D14	3400	3330	102	34-165	
2,4,6-Tribromophenol	6260	6660	94	44-104	

Lab Batch #: 83102

Sample: 10061007-002 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3170	3320	95	48-112	
2-Fluorophenol	6130	6650	92	45-107	
Nitrobenzene-d5	3150	3320	95	44-98	
Phenol-d6	5980	6650	90	38-100	
Terphenyl-D14	3520	3320	106	34-165	
2,4,6-Tribromophenol	6930	6650	104	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83102

Sample: 10061007-002 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3190	3330	96	48-112	
2-Fluorophenol	6270	6660	94	45-107	
Nitrobenzene-d5	3170	3330	95	44-98	
Phenol-d6	6020	6660	90	38-100	
Terphenyl-D14	3480	3330	104	34-165	
2,4,6-Tribromophenol	6770	6660	102	44-104	

Lab Batch #: 83102

Sample: 33232-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3070	3330	92	48-112	
2-Fluorophenol	6190	6650	93	45-107	
Nitrobenzene-d5	3120	3330	94	44-98	
Phenol-d6	5830	6650	88	38-100	
Terphenyl-D14	3510	3330	105	34-165	
2,4,6-Tribromophenol	6660	6650	100	44-104	

Lab Batch #: 83102

Sample: 33232-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2970	3320	89	48-112	
2-Fluorophenol	6130	6650	92	45-107	
Nitrobenzene-d5	3140	3320	95	44-98	
Phenol-d6	5800	6650	87	38-100	
Terphenyl-D14	3040	3320	92	34-165	
2,4,6-Tribromophenol	6390	6650	96	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

09/02/2010

Work Order #: 10061007

Project ID: N/A

Lab Batch #: 83102

Sample: 33232-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

TCL Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3040	3320	92	48-112	
2-Fluorophenol	6180	6640	93	45-107	
Nitrobenzene-d5	3080	3320	93	44-98	
Phenol-d6	5840	6640	88	38-100	
Terphenyl-D14	3190	3320	96	34-165	
2,4,6-Tribromophenol	6570	6640	99	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = $100 * A / B$

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Blank Spike Recovery

Project Name: Gude

Work Order #: 10061007

Project ID: N/A

Prep Batch #:

Date Prepared: 06/15/2010

Sample ID: 83086-1-BKS

Matrix: Solid

Lab Batch ID 83086

Date Analyzed: 06/15/2010

Analyst: 1022

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Cyanide Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Cyanide, Total	<1 250	5 000	4 910	98	80-120	

Prep Batch #: 33220

Date Prepared: 06/14/2010

Sample ID: 33220-1-BKS

Matrix: Solid

Lab Batch ID 83077

Date Analyzed: 06/16/2010

Analyst: 1033

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1 250	20 00	19 87	99	75-125	
Arsenic	<0 2500	20 00	19 65	98	75-125	
Barium	<1 250	20 00	19 74	99	75-125	
Beryllium	<1 250	20 00	18 91	95	75-125	
Cadmium	<1 250	20 00	19 05	95	75-125	
Chromium	<1 250	20 00	20 36	102	75-125	
Cobalt	<1 250	20 00	19 69	98	75-125	
Copper	<1 250	20 00	19 47	97	75-125	
Lead	<1 250	20 00	20 08	100	75-125	
Mercury	<0 0500	0 5000	0 4950	99	75-125	
Nickel	<1 250	20 00	20 52	103	75-125	
Selenium	<1 250	20 00	18 37	92	75-125	
Silver	<1 250	20 00	20 17	101	75-125	
Thallium	<1 000	20 00	19 89	99	75-125	
Tin	<2 500	20 00	19 71	99	75-125	
Vanadium	<1 250	20 00	19 80	99	75-125	
Zinc	<5 000	20 00	19 01	95	75-125	

Blank Spike Recovery [D] = 100*(([C]-[A])/[B])

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H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name:Gude

Work Order #:10061007

Prep Batch #:1

Lab Batch ID:83227

Units: ug/kg

Date Prepared:06/21/2010
Date Analyzed:06/22/2010

Sample: 33313-I-BKS
Method:SW3550 / SW808IB

Project ID: N/A
Analyst: 1029
Matrix: Solid

Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<9.891	19.72	22.05	112	19.82	21.35	108	4	80-126	25	
gamma-BHC (Lindane)	<9.891	19.72	22.20	113	19.82	21.64	109	4	81-124	25	
beta-BHC	<9.891	19.72	21.01	107	19.82	20.83	105	2	77-121	25	
delta-BHC	<9.891	19.72	23.47	119	19.82	23.38	118	1	75-126	25	
Heptachlor	<9.891	19.72	20.80	105	19.82	20.30	102	3	76-120	25	
Aldrin	<9.891	19.72	21.72	110	19.82	21.29	107	3	81-122	25	
Heptachlor epoxide	<9.891	19.72	21.80	111	19.82	21.59	109	2	81-123	25	
gamma-Chlordane	<9.891	19.72	23.93	121	19.82	23.79	120	1	89-135	25	
alpha-Chlordane	<9.891	19.72	21.82	111	19.82	21.69	109	2	82-121	25	
4,4-DDE	<9.891	19.72	22.12	112	19.82	22.01	111	1	78-138	25	
Endosulfan I	<9.891	19.72	21.67	110	19.82	21.50	108	2	82-123	25	
Dieldrin	<9.891	19.72	22.01	112	19.82	22.00	111	1	81-126	25	
Endrin	<9.891	19.72	21.78	110	19.82	21.60	109	1	70-131	25	
4,4-DDD	<9.891	19.72	22.04	112	19.82	22.23	112	0	68-143	25	
Endosulfan II	<9.891	19.72	22.49	114	19.82	22.68	114	0	80-133	25	
4,4-DDT	<9.891	19.72	23.56	119	19.82	23.65	119	0	68-129	25	
Endrin aldehyde	<9.891	19.72	22.70	115	19.82	23.38	118	3	77-127	25	
Methoxychlor	<9.891	19.72	21.32	108	19.82	21.49	108	0	67-121	25	
Endosulfan sulfate	<9.891	19.72	23.03	117	19.82	23.32	118	1	79-126	25	
Endrin ketone	<9.891	19.72	23.44	119	19.82	23.88	120	1	82-137	25	

Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch #: 1

Lab Batch ID: 83216

Units: mg/kg

Project ID: N/A

Analyst: 1029

Matrix: Solid

Sample: 33314-I-BKS

Method: SW3550 / SW8082

Date Prepared: 06/21/2010

Date Analyzed: 06/22/2010

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Polychlorinated Biphenyls	<0.0495	0.4941	0.4020	81	0.4926	0.4273	87	7	59-123	25
PCB-1016	<0.0495	0.4941	0.4857	98	0.4926	0.5084	103	5	54-152	25	

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Relative Percent Difference $RPD = 200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch #: 1

Lab Batch ID: 83127

Units: ug/kg

Date Prepared: 06/17/2010

Date Analyzed: 06/17/2010

Sample: 33262-I-BKS

Method: SW8151A_PREP / SW8151

Project ID: N/A

Analyst: 1029

Matrix: Solid

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<9.80	992.1	897.2	90	994.0	881.6	89	1	65-110	25	
2,4,5-TP (Silvex)	<9.980	99.21	90.87	92	99.4	88.07	89	3	58-130	25	
2,4,5-T	<9.980	99.21	105.9	107	99.4	102.4	103	4	81-130	25	
Dinoseb	<49.90	496	430	87	497.0	406.9	82	6	62-102	25	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name:Gude

Work Order #:10061007

Prep Batch #:1

Lab Batch ID:82991

Units: ug/kg

Sample: 33203-1-BKS
Method:SW5030 / SW8260B

Date Prepared:06/11/2010
Date Analyzed:06/11/2010

Project ID: N/A
Analyst: 1035
Matrix: Solid

TCL Volatile Organic Compounds	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Analytes												
Dichlorodifluoromethane	<2.500	60.00	81.76	136	60.0	88.20	147	8	55-125	23	H	
Chloromethane	<2.500	60.00	79.69	133	60.0	83.90	140	5	62-125	30	H	
Vinyl Chloride	<2.500	60.00	84.53	141	60.0	86.08	143	1	65-130	25	H	
Bromomethane	<2.500	60.00	81.10	135	60.0	82.59	138	2	59-131	20	H	
Chloroethane	<2.500	60.00	85.27	142	60.0	87.05	145	2	57-135	20	H	
Acetone	<10.00	60.00	46.23	77	60.0	43.37	72	7	7-180	21		
Trichlorofluoromethane	<2.500	60.00	83.95	140	60.0	91.82	153	9	55-133	25	H	
1,1-Dichloroethene	<2.500	60.00	77.17	129	60.0	79.74	133	3	60-122	14	H	
Methylene chloride	<2.500	60.00	69.13	115	60.0	72.11	120	4	63-125	35		
trans-1,2-Dichloroethene	<2.500	60.00	81.40	136	60.0	77.16	129	5	62-129	20	H	
1,1-Dichloroethane	<2.500	60.00	76.73	128	60.0	78.71	131	2	55-135	20		
Vinyl acetate	<2.500	60.00	65.56	109	60.0	67.22	112	3	57-136	25		
2-Butanone (MEK)	<10.00	60.00	44.74	75	60.0	43.79	73	3	36-201	30		
cis-1,2-Dichloroethene	<2.500	60.00	74.36	124	60.0	78.62	131	5	60-127	20	H	
Bromochloromethane	<2.500	60.00	71.51	119	60.0	73.69	123	3	66-127	20		
Chloroform	<2.500	60.00	71.78	120	60.0	74.38	124	3	64-113	20	H	
2,2-Dichloropropane	<2.500	60.00	75.98	127	60.0	78.68	131	3	53-129	20	H	
1,1,1-Trichloroethane	<2.500	60.00	77.12	129	60.0	82.74	138	7	57-127	20	H	
1,2-Dichloroethane	<2.500	60.00	68.73	115	60.0	70.07	117	2	62-124	20		
1,1-Dichloropropene	<2.500	60.00	78.22	130	60.0	82.71	138	6	61-122	20	H	

Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name:Gude

Work Order #:10061007

Prep Batch #:1

Lab Batch ID:82991

Units: ug/kg

Sample: 33203-1-BKS

Date Prepared:06/11/2010

Date Analyzed:06/11/2010

Project ID: N/A

Analyst: 1035

Matrix: Solid

TCL Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon tetrachloride	<2.500	60.00	79.70	133	60.0	84.07	140	5	55-131	20	H
Benzene	<2.500	60.00	74.70	125	60.0	77.75	130	4	64-114	11	H
Dibromomethane	<2.500	60.00	68.97	115	60.0	70.25	117	2	64-132	23	
1,2-Dichloropropane	<2.500	60.00	71.45	119	60.0	73.74	123	3	61-117	20	H
Carbon Disulfide	<5.000	60.00	75.72	126	60.0	79.18	132	5	37-161	24	
Trichloroethene	<2.500	60.00	78.81	131	60.0	80.47	134	2	62-121	14	H
Acrylonitrile	<10.00	60.00	68.01	113	60.0	65.69	109	4	59-168	14	
Bromodichloromethane	<2.500	60.00	72.28	120	60.0	73.05	122	2	62-126	20	
cis-1,3-Dichloropropene	<2.500	60.00	73.43	122	60.0	74.58	124	2	59-119	20	H
4-Methyl-2-Pentanone (MIBK)	<10.00	60.00	49.42	82	60.0	46.11	77	6	59-148	25	
trans-1,3-Dichloropropene	<2.500	60.00	71.89	120	60.0	73.54	123	2	51-126	20	
1,1,2-Trichloroethane	<2.500	60.00	69.69	116	60.0	70.82	118	2	60-134	20	
Toluene	<2.500	60.00	77.13	129	60.0	80.11	134	4	64-117	13	H
1,3-Dichloropropane	<2.500	60.00	66.25	110	60.0	67.12	112	2	61-129	20	
2-Hexanone (MEK)	<10.00	60.00	45.40	76	60.0	43.71	73	4	9-176	21	
1,2-Dibromoethane	<2.500	60.00	68.66	114	60.0	69.50	116	2	65-135	20	
Dibromochloromethane	<2.500	60.00	69.43	116	60.0	71.41	119	3	67-126	20	
Acrolein	<10.00	60.00	68.98	115	60.0	71.05	118	3	52-168	20	
1,1,1,2-Tetrachloroethane	<2.500	60.00	73.55	123	60.0	75.26	125	2	64-121	20	H
Bromoform	<2.500	60.00	71.10	119	60.0	70.89	118	1	62-120	20	

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Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch #: 1

Lab Batch ID: 82991

Units: ug/kg

Sample: 33203-1-BKS

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

Project ID: N/A

Analyst: 1035

Matrix: Solid

TCL Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
trans-1,4-dichloro-2-butene	<2.500	60.00	66.58	111	60.0	65.20	109	2	43-133	20	
Tetrachloroethene	<2.500	60.00	78.56	131	60.0	84.28	140	7	58-129	20	H
Chlorobenzene	<2.500	60.00	72.74	121	60.0	75.15	125	3	64-116	13	H
Ethylbenzene	<2.500	60.00	76.15	127	60.0	79.67	133	5	61-118	30	H
m&p-Xylene	<5.000	120	154.8	129	120.0	161.4	135	5	63-116	20	H
Styrene	<2.500	60.00	75.83	126	60.0	78.43	131	4	60-112	51	H
1,1,2,2-Tetrachloroethane	<2.500	60.00	60.65	101	60.0	61.18	102	1	58-144	31	
o-Xylene	<2.500	60.00	76.66	128	60.0	79.80	133	4	65-117	20	H
1,2,3-Trichloropropane	<2.500	60.00	68.38	114	60.0	66.44	111	3	59-139	20	
1,3-Dichlorobenzene	<2.500	60.00	72.54	121	60.0	74.91	125	3	58-123	20	H
1,4-Dichlorobenzene	<2.500	60.00	70.92	118	60.0	73.35	122	3	58-121	20	H
1,2-Dichlorobenzene	<2.500	60.00	70.54	118	60.0	72.15	120	2	59-124	20	
1,2-Dibromo-3-chloropropane	<20.00	60.00	65.57	109	60.0	62.66	104	5	57-144	28	
1,2,4-Trichlorobenzene	<2.500	60.00	74.49	124	60.0	76.31	127	2	46-122	20	H
Iodomethane	<10.00	60.00	67.34	112	60.0	69.60	116	4	46-137	25	
Naphthalene	<2.500	60.00	71.54	119	60.0	72.29	120	1	54-164	20	
1,2,3-Trichlorobenzene	<2.500	60.00	73.18	122	60.0	74.28	124	2	48-126	20	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits

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 Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name:Gude

Work Order #:10061007

Prep Batch #:1

Lab Batch ID:83102

Units: ug/kg

Sample: 33232-1-BKS

Method:SW3550 / SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Solid

Date Prepared:06/15/2010

Date Analyzed:06/15/2010

Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
TCL Semivolatile Organic Compounds												
Acenaphthene	<83.06	1331	1376	103	1327.0	1360	102	1	63-120	25		
Acenaphthylene	<83.06	1331	1430	107	1327.0	1428	108	1	59-125	25		
Acetophenone	<83.06	1331	1448	109	1327.0	1445	109	0	57-122	25		
Anthracene	<83.06	1331	1460	110	1327.0	1438	108	2	63-121	25		
Benzo(a)anthracene	<83.06	1331	1591	120	1327.0	1542	116	3	61-130	25		
Benzo(a)pyrene	<23.26	1331	1511	114	1327.0	1477	111	3	58-141	25		
Benzo(b)fluoranthene	<83.06	1331	1659	125	1327.0	1647	124	1	59-140	25		
Benzo(g,h,i)perylene	<83.06	1331	1618	122	1327.0	1613	122	0	32-158	25		
Benzo(k)fluoranthene	<83.06	1331	1514	114	1327.0	1496	113	1	55-137	25		
Benzyl butyl phthalate	<83.06	1331	1477	111	1327.0	1368	103	7	57-132	25		
bis(2-chloroethoxy) methane	<83.06	1331	1333	100	1327.0	1321	100	0	61-123	30		
bis(2-chloroethyl) ether	<83.06	1331	849	64	1327.0	867.3	65	2	55-127	25		
bis(2-chloroisopropyl) ether	<83.06	1331	1294	97	1327.0	1293	97	0	42-128	25		
bis(2-ethylhexyl) phthalate	<83.06	1331	1386	104	1327.0	1288	97	7	52-142	25		
4-Bromophenylphenyl ether	<83.06	1331	1425	107	1327.0	1423	107	0	66-138	30		
Di-n-butyl phthalate	<166.1	1331	1468	110	1327.0	1467	111	1	54-126	25		
4-Chloro-3-methylphenol	<83.06	1331	1527	115	1327.0	1505	113	2	63-125	25		
4-Chloroaniline	<166.1	1331	1499	113	1327.0	1462	110	3	64-118	25		
2-Chloronaphthalene	<83.06	1331	1372	103	1327.0	1368	103	0	62-117	25		
2-Chlorophenol	<83.06	1331	1467	110	1327.0	1473	111	1	57-128	25		

Blank Sample Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

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 Baltimore, MD 21228

= Recovery of BS,BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Guide

Work Order #: 10061007

Prep Batch #: 1

Lab Batch ID: 83102

Units: ug/kg

Sample: 33232-i-BKS

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Project ID: N/A
Analyst: 1040
Matrix: Solid

TCL Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
4-Chlorophenyl phenyl ether	<83.06	1331	1426	107	1327.0	1416	107	0	65-129	25	
Chrysene	<83.06	1331	1532	115	1327.0	1501	113	2	62-127	25	
Dibenz(a,h)anthracene	<23.26	1331	1640	123	1327.0	1649	124	1	43-148	25	
Dibenzofuran	<83.06	1331	1437	108	1327.0	1419	107	1	63-120	25	
3,3-Dichlorobenzidine	<83.06	1331	1600	120	1327.0	1566	118	2	32-138	25	
2,4-Dichlorophenol	<83.06	1331	1472	111	1327.0	1456	110	1	65-127	25	
Diethyl phthalate	<83.06	1331	1461	110	1327.0	1454	110	0	58-124	25	
Dimethyl phthalate	<83.06	1331	1447	109	1327.0	1445	109	0	55-125	25	
2,4-Dimethylphenol	<83.06	1331	1483	111	1327.0	1473	111	0	65-124	30	
4,6-Dinitro-2-methyl ptenol	<83.06	1331	1954	147	1327.0	1933	146	1	26-167	25	
2,4-Dinitrophenol	<166.1	1331	2058	155	1327.0	2024	153	1	18-177	25	
2,4-Dinitrotoluene	<83.06	1331	1648	124	1327.0	1617	122	2	60-134	25	
2,6-Dinitrotoluene	<83.06	1331	1606	121	1327.0	1606	121	0	63-136	25	
Fluoranthene	<83.06	1331	1581	119	1327.0	1560	118	1	54-127	25	
Fluorene	<83.06	1331	1426	107	1327.0	1416	107	0	64-119	25	
Hexachlorobenzene	<83.06	1331	1340	101	1327.0	1341	101	0	58-124	25	
Hexachlorobutadiene	<83.06	1331	1432	108	1327.0	1415	107	1	64-128	25	
Hexachlorocyclopentadiene	<83.06	1331	1747	131	1327.0	1716	129	2	26-152	25	
Hexachloroethane	<83.06	1331	1461	110	1327.0	1474	111	1	55-125	25	
Indeno(1,2,3-c,d)pyrene	<83.06	1331	1721	129	1327.0	1754	132	2	38-150	25	

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Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
Laboratory Control Sample (LCS) Percent Recovery [DI] = $100 * (C) / (B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [GI] = $100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch #: 1

Lab Batch ID: 83102

Units: ug/kg

Sample: 33232-I-BKS

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Project ID: N/A

Analyst: 1040

Matrix: Solid

TCL Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Isophorone	<83.06	1331	1378	104	1327.0	1358	102	2	56-120	25	
2-Methylnaphthalene	<83.06	1331	1367	103	1327.0	1357	102	1	63-120	25	
2-Methylphenol	<83.06	1331	1434	108	1327.0	1448	109	1	57-121	30	
3&4-Methylphenol	<83.06	1331	1476	111	1327.0	1481	112	1	49-123	30	
4-Nitroaniline	<83.06	1331	1840	138	1327.0	1746	132	4	53-128	25	H
3-Nitroaniline	<83.06	1331	1623	122	1327.0	1583	119	2	53-132	25	
2-Nitroaniline	<166.1	1331	1670	125	1327.0	1649	124	1	54-131	25	
Nitrobenzene	<83.06	1331	1395	105	1327.0	1389	105	0	53-119	25	
2-Nitrophenol	<83.06	1331	1597	120	1327.0	1597	120	0	65-137	25	
4-Nitrophenol	<83.06	1331	1694	127	1327.0	1598	120	6	50-123	25	H
N-Nitrosodimethylamine	<83.06	1331	1355	102	1327.0	1356	102	0	62-123	25	
N-Nitrosodi-n-propylamine	<33.22	1331	1387	104	1327.0	1388	105	1	46-121	25	
N-Nitrosodiphenylamine	<83.06	1331	1341	101	1327.0	1346	101	0	56-129	25	
Di-n-octyl phthalate	<83.06	1331	1495	112	1327.0	1363	103	8	38-144	25	
1,2,4,5-Tetrachlorobenzene	<83.06	1331	1426	107	1327.0	1422	107	0	64-127	25	
Pentachlorophenol	<166.1	1331	1591	120	1327.0	1553	117	3	46-134	25	
Phenanthrene	<83.06	1331	1387	104	1327.0	1368	103	1	61-119	25	
Phenol	<83.06	1331	1295	97	1327.0	1310	99	2	47-108	25	
Pyrene	<83.06	1331	1485	112	1327.0	1349	102	9	54-141	25	
2,3,4,6-Tetrachlorophenol	<83.06	1331	1546	116	1327.0	1502	113	3	56-130	25	

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Relative Percent Difference $RPD = 200 * (D-G) / (D+G)$
Laboratory Control Sample (LCS) Percent Recovery $DI = 100 * (C) / (B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $IGI = 100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch #: 1

Lab Batch ID: 83102

Units: ug/kg

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Sample: 33232-1-BKS

Project ID: N/A

Analyst: 1040

Matrix: Solid

TCL Semivolatile Organic Compounds		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4,6-Trichlorophenol		<83.06	1331	1580	119	1327.0	1565	118	1	67-127	25	
2,4,5-Trichlorophenol		<83.06	1331	1644	124	1327.0	1602	121	2	69-132	25	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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 Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch 33220
 Lab Batch ID: 83077

Date Prepared: 06/14/2010
 Date Analyzed: 06/16/2010

Client Sample Id: TP-4 18" S
 Sample ID: 10061113-021 S
 Method: SW3050B/SW6020

Project ID: N/A
 Analyst: 1033
 Matrix: Soil

Reporting Units: mg/kg

Total Metals Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Antimony	<1.411	22.03	15.94	72	20.16	14.25	71	1	75-125	30	X
Arsenic	63.57	22.03	87.66	109	20.16	85.70	110	1	75-125	30	
Barium	111.1	22.03	133.5	102	20.16	130.1	94	8	75-125	30	
Beryllium	<1.411	22.03	20.73	94	20.16	18.74	93	1	75-125	30	
Cadmium	<1.411	22.03	22.39	102	20.16	20.42	101	1	75-125	30	
Chromium	54.82	22.03	69.49	67	20.16	69.92	75	11	75-125	30	X
Cobalt	22.75	22.03	41.85	87	20.16	39.24	82	6	75-125	30	
Copper	61.71	22.03	89.70	127	20.16	82.47	103	21	75-125	30	X
Lead	230.1	22.03	261.6	143	20.16	280	248	54	75-125	30	XF
Mercury	0.0621	0.5506	0.6718	111	0.5041	0.6100	109	2	75-125	30	
Nickel	26.11	22.03	50.54	111	20.16	46.91	103	7	75-125	30	
Selenium	<1.411	22.03	19.61	89	20.16	17.51	87	2	75-125	30	
Silver	<1.411	22.03	23.23	105	20.16	21.14	105	0	75-125	30	
Thallium	<1.129	22.03	24.05	109	20.16	22.06	109	0	75-125	30	
Tin	<2.823	22.03	24.88	113	20.16	22.90	114	1	75-125	30	
Vanadium	90.05	22.03	106.9	76	20.16	121.9	158	70	75-125	30	XF
Zinc	48.56	22.03	72.74	110	20.16	70.32	108	2	75-125	30	

atrix Spike Percent Recovery ID] = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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 Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch 33313

Lab Batch ID: 83227

Reporting Units: ug/kg

Date Prepared: 06/21/2010
Date Analyzed: 06/22/2010

Client Sample Id: Gude-MW2A-SO-12 to 14 S
Sample ID: 10061007-001 S
Method: SW3550 /SW8081B

Project ID: N/A
Analyst: 1029
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spiked Sample Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Organochlorine Pesticides											
Analytes											
alpha-BHC	<11.77	23.67	27.90	118	23.60	<11.80	16	152	70-130	30	XF
gamma-BHC (Lindane)	<11.77	23.67	25.07	106	23.60	<11.80	18	142	72-128	30	XF
beta-BHC	<11.77	23.67	25.93	110	23.60	<11.80	23	131	74-121	30	XF
delta-BHC	<11.77	23.67	27.06	114	23.60	<11.80	21	138	72-127	30	XF
Heptachlor	<11.77	23.67	24.29	103	23.60	<11.80	21	132	66-127	30	XF
Aldrin	<11.77	23.67	25.26	107	23.60	<11.80	18	142	71-130	30	XF
Heptachlor epoxide	<11.77	23.67	24.97	105	23.60	<11.80	20	136	73-128	30	XF
gamma-Chlordane	<11.77	23.67	28.82	122	23.60	<11.80	23	137	73-153	30	XF
alpha-Chlordane	<11.77	23.67	26.51	112	23.60	<11.80	22	134	62-144	30	XF
4,4-DDE	<11.77	23.67	27.22	115	23.60	<11.80	21	138	78-143	30	XF
Endosulfan I	<11.77	23.67	26.21	111	23.60	<11.80	21	136	73-129	30	XF
Dieldrin	<11.77	23.67	27.13	115	23.60	<11.80	22	136	72-136	30	XF
Endrin	<11.77	23.67	28.31	120	23.60	<11.80	23	136	82-131	30	XF
4,4-DDD	<11.77	23.67	27.35	116	23.60	<11.80	23	134	70-143	30	XF
Endosulfan II	<11.77	23.67	27.62	117	23.60	<11.80	24	132	75-136	30	XF
4,4-DDT	<11.77	23.67	19.45	82	23.60	<11.80	17	131	78-125	30	XF
Endrin aldehyde	<11.77	23.67	29.13	123	23.60	<11.80	28	126	78-130	30	XF
Methoxychlor	<11.77	23.67	27.40	116	23.60	<11.80	28	122	71-122	30	XF
Endosulfan sulfate	<11.77	23.67	29.48	125	23.60	<11.80	27	129	77-129	30	XF
Endrin ketone	<11.77	23.67	28.77	122	23.60	<11.80	27	128	75-145	30	XF

atrix Spike Percent Recovery |D| = 100*(C-A)/B
 atrix Spike Duplicate Percent Recovery |G| = 100*(F-A)/E
 = RPD exceeded the laboratory control limits
 = Recovery of MS, MSD or both outside of QC Criteria
 F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch 33314

Lab Batch ID: 83216

Reporting Units: mg/kg

Date Prepared: 06/21/2010

Date Analyzed: 06/22/2010

Client Sample Id: Gude-MW2A-SO-12 to 14 S

Sample ID: 10061007-001 S

Method: SW3550/SW8082

Project ID: N/A

Analyst: 1029

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Polychlorinated Biphenyls	<0.0588	0.5889	0.4794	81	0.5912	0.4772	81	0	52-122	30
PCB-1016	<0.0588	0.5889	0.6053	103	0.5912	0.6209	105	2	52-184	30	

atrix Spike Percent Recovery [D] = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch 33262
 Lab Batch ID: 83127
 Reporting Units: ug/kg

Client Sample Id: Gude-MW1A-SO-14 to 18 S
 Sample ID: 10060417-001 S
 Method: SW8151A_PREP /SW8151A

Project ID: N/A
 Analyst: 1029
 Matrix: Soil

Date Prepared: 06/17/2010
 Date Analyzed: 06/17/2010

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chlorinated Herbicides-2,4D & 2,4,5TP											
2,4-D	<116.7	115.8	867.6	75	115.5	856	74	1	57-117	25	
2,4,5-TP (Silvex)	<11.67	115.8	88.19	76	115.5	85.08	74	3	59-126	25	
2,4,5-T	<11.67	115.8	104.1	90	115.5	105.4	91	1	66-144	25	
Dinoseb	<58.36	579	426.1	74	577.3	405.7	70	6	63-106	25	

Client Sample Id: Gude-MW1A-SO-14 to 18 S
 Sample ID: 10060417-001 S
 Method: /SW9014

Analyst: 1022
 Matrix: Soil

Date Prepared: 06/15/2010
 Date Analyzed: 06/15/2010

Prep Batch
 Lab Batch ID: 83086
 Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Cyanide Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Cyanide, Total	<1.471	5.882	5.200	88	5.882	5.294	90	2	80-120	20	

atrix Spike Percent Recovery [D] = 100*(C-A)/B
 atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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 Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch 33203

Lab Batch ID: 82991

Reporting Units: ug/kg

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

Client Sample Id: 25'NW S

Sample ID: 10061105-002 S

Method: SW5030/SW8260B

Project ID: N/A

Analyst: 1035

Matrix: Soil

TCL Volatile Organic Compounds Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Dichlorodifluoromethane	<2.874	68.97	66.09	96	68.97	61.75	90	6	26-140	23	
Chloromethane	<2.874	68.97	65.23	95	68.97	64.20	93	2	42-126	30	
Vinyl Chloride	<2.874	68.97	76.31	111	68.97	69.95	101	9	34-137	30	
Bromomethane	<2.874	68.97	57.21	83	68.97	55.13	80	4	35-132	20	
Chloroethane	<2.874	68.97	64.22	93	68.97	60.36	88	6	33-133	20	
Acetone	<11.49	68.97	25.87	38	68.97	23.41	34	11	27-177	21	
Trichlorofluoromethane	<2.874	68.97	58.25	84	68.97	61.01	88	5	36-136	30	
1,1-Dichloroethene	<2.874	68.97	61.17	89	68.97	35.94	52	52	38-124	14	F
Methylene chloride	<2.874	68.97	57.31	83	68.97	51.95	75	10	35-129	35	
trans-1,2-Dichloroethene	<2.874	68.97	59.77	87	68.97	61.32	89	2	33-135	20	
1,1-Dichloroethane	<2.874	68.97	59.29	86	68.97	56.00	81	6	45-125	20	
Vinyl acetate	<2.874	68.97	62.06	90	68.97	58.85	85	6	4-128	30	
2-Butanone (MEK)	<11.49	68.97	36.40	53	68.97	35.28	51	4	17-152	30	
cis-1,2-Dichloroethene	<2.874	68.97	246.8	358	68.97	174	252	35	45-122	20	XF
Bromochloromethane	<2.874	68.97	68.67	100	68.97	67.14	97	3	42-127	20	
Chloroform	<2.874	68.97	65.16	94	68.97	61.66	89	5	44-119	20	
2,2-Dichloropropane	<2.874	68.97	61.26	89	68.97	57.05	83	7	34-126	20	
1,1,1-Trichloroethane	<2.874	68.97	67.90	98	68.97	65.16	94	4	40-132	20	
1,2-Dichloroethane	<2.874	68.97	64.69	94	68.97	61.77	90	4	30-132	20	
1,1-Dichloropropene	<2.874	68.97	68.52	99	68.97	64.51	94	5	29-132	20	
Carbon tetrachloride	<2.874	68.97	66.01	96	68.97	63.06	91	5	30-138	20	
Benzene	<2.874	68.97	65.97	96	68.97	61.93	90	6	35-126	11	
Dibromomethane	<2.874	68.97	67.07	97	68.97	64.86	94	3	37-129	23	
1,2-Dichloropropane	<2.874	68.97	64.69	94	68.97	60.75	88	7	41-117	20	

atrix Spike Percent Recovery IDI = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery IG1 = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch

Lab Batch ID: 82991

Reporting Units: ug/kg

Client Sample Id:

Sample ID: 10061105-002 S

Method: SW5030 /SW8260B

Project ID: N/A

Analyst: 1035

Matrix: Soil

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

TCL Volatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon Disulfide	<5.747	68.97	54.17	79	68.97	48.00	70	12	11-147	24	
Trichloroethene	<2.874	68.97	87.31	127	68.97	75.84	110	14	33-132	14	
Acrylonitrile	<11.49	68.97	68.99	100	68.97	66.45	96	4	22-149	14	
Bromodichloromethane	<2.874	68.97	64.80	94	68.97	60.98	88	7	34-127	20	
cis-1,3-Dichloropropene	<2.874	68.97	65.94	96	68.97	61.05	89	8	22-122	20	
4-Methyl-2-Pentanone (MIBK)	<11.49	68.97	54.46	79	68.97	54.29	79	0	13-137	25	
trans-1,3-Dichloropropene	<2.874	68.97	64.77	94	68.97	61.63	89	5	25-118	20	
1,1,2-Trichloroethane	<2.874	68.97	67.05	97	68.97	65.07	94	3	32-132	20	
Toluene	<2.874	68.97	65.62	95	68.97	63.18	92	3	27-129	13	
1,3-Dichloropropane	<2.874	68.97	65.78	95	68.97	61.21	89	7	30-130	20	
2-Hexanone (MBK)	<11.49	68.97	37.99	55	68.97	37.72	55	0	4-120	21	
1,2-Dibromoethane	<2.874	68.97	69.86	101	68.97	67.03	97	4	35-132	20	
Dibromochloromethane	<2.874	68.97	66.69	97	68.97	63.05	91	6	30-130	20	
Acrolein	<11.49	68.97	69.45	101	68.97	66.97	97	4	12-153	20	
1,1,1,2-Tetrachloroethane	<2.874	68.97	65.48	95	68.97	61.92	90	5	37-126	20	
Bromoform	<2.874	68.97	67.30	98	68.97	65.21	95	3	19-125	20	
trans-1,4-dichloro-2-butene	<2.874	68.97	65.48	95	68.97	60.80	88	8	2-122	20	
Tetrachloroethene	<2.874	68.97	67.17	97	68.97	65.30	95	2	22-141	20	
Chlorobenzene	<2.874	68.97	63.60	92	68.97	61.45	89	3	25-127	13	
Ethylbenzene	<2.874	68.97	68.06	99	68.97	63.15	92	7	18-133	30	
m&p-Xylene	<5.747	137.9	133.3	97	137.9	126.6	92	5	18-134	20	
Styrene	<2.874	68.97	66.60	97	68.97	62.57	91	6	17-122	51	
1,1,2,2-Tetrachloroethane	<2.874	68.97	68.32	99	68.97	62.49	91	8	34-130	31	
o-Xylene	<2.874	68.97	67.06	97	68.97	63.55	92	5	16-139	20	

atrix Spike Percent Recovery [D] = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Guide

Work Order #: 10061007

Prep Batch

Lab Batch ID: 82991

Reporting Units: ug/kg

Client Sample Id:

Sample ID: 10061105-002 S

Method: SW5030 /SW8260B

Project ID: N/A

Analyst: 1035

Matrix: Soil

Date Prepared: 06/11/2010

Date Analyzed: 06/11/2010

TCL Volatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	1,2,3-Trichloropropane	<2.874	68.97	70.06	102	68.97	64.59	94	8	23-134	20
1,3-Dichlorobenzene	<2.874	68.97	64.02	93	68.97	61.02	88	6	21-123	20	
1,4-Dichlorobenzene	<2.874	68.97	62.40	90	68.97	59.48	86	5	29-115	20	
1,2-Dichlorobenzene	<2.874	68.97	63.99	93	68.97	60.70	88	6	20-126	20	
1,2-Dibromo-3-chloropropane	<22.99	68.97	76.07	110	68.97	71.82	104	6	33-125	28	
1,2,4-Trichlorobenzene	<2.874	68.97	66.74	97	68.97	63.02	91	6	12-108	20	
Iodomethane	<11.49	68.97	52.70	76	68.97	55.69	81	6	22-131	25	
Naphthalene	<2.874	68.97	78.05	113	68.97	76.24	111	2	36-155	20	
1,2,3-Trichlorobenzene	<2.874	68.97	67.79	98	68.97	65.76	95	3	5-111	20	

atrix Spike Percent Recovery [D] = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch 33232

Lab Batch ID: 83102

Reporting Units: ug/kg

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Client Sample Id: Gude-MW2B-SO-14 to 16 S

Sample ID: 10061007-002 S

Method: SW3550/SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

TCL Semivolatile Organic Compounds		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<95.63	1528	1461	96	1531	1457	95	1	52-128	30	
Acenaphthylene	<95.63	1528	1513	99	1531	1520	99	0	59-119	30	
Acetophenone	<95.63	1528	1507	99	1531	1483	97	2	53-115	30	
Anthracene	<95.63	1528	1566	102	1531	1544	101	1	51-137	30	
Benzo(a)anthracene	<95.63	1528	1707	112	1531	1646	108	4	45-163	30	
Benzo(a)pyrene	<95.63	1528	1635	107	1531	1580	103	4	52-164	30	
Benzo(b)fluoranthene	<95.63	1528	1816	119	1531	1790	117	2	58-154	30	
Benzo(g,h,i)perylene	<95.63	1528	1770	116	1531	1811	118	2	37-144	30	
Benzo(k)fluoranthene	<95.63	1528	1696	111	1531	1541	101	9	49-160	30	
Benzyl butyl phthalate	<95.63	1528	1553	102	1531	1550	101	1	40-179	30	
bis(2-chloroethoxy) methane	<95.63	1528	1413	92	1531	1401	92	0	53-120	30	
bis(2-chloroethyl) ether	<95.63	1528	1400	92	1531	1409	92	0	47-116	30	
bis(2-chloroisopropyl) ether	<95.63	1528	1320	86	1531	1317	86	0	45-112	30	
bis(2-ethylhexyl) phthalate	<95.63	1528	1482	97	1531	1491	97	0	43-172	30	
4-Bromophenylphenyl ether	<95.63	1528	1550	101	1531	1550	101	0	44-159	30	
Di-n-butyl phthalate	<191.3	1528	1616	106	1531	1611	105	1	54-131	30	
4-Chloro-3-methylphenol	<95.63	1528	1617	106	1531	1574	103	3	57-130	30	
4-Chloroaniline	<191.3	1528	1559	102	1531	1535	100	2	50-122	30	
2-Chloronaphthalene	<95.63	1528	1467	96	1531	1460	95	1	50-124	30	
2-Chlorophenol	<95.63	1528	1485	97	1531	1489	97	0	54-119	30	
4-Chlorophenyl phenyl ether	<95.63	1528	1536	101	1531	1512	99	2	57-133	30	
Chrysene	<95.63	1528	1662	109	1531	1613	105	4	42-165	30	
Dibenz(a,h)anthracene	<95.63	1528	1820	119	1531	1847	121	2	37-140	30	
Dibenzofuran	<95.63	1528	1528	100	1531	1508	98	2	44-138	30	

atrix Spike Percent Recovery ID1 = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery IG1 = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Guide

Work Order #: 10061007

Prep Batch

Lab Batch ID: 83102

Reporting Units: ug/kg

Client Sample Id:

Sample ID: 10061007-002 S

Method: SW3550/SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

TCL Semivolatile Organic Compounds	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
3,3-Dichlorobenzidine	<95.63	1528	1701	111	1531	112	1	11-140	30	
2,4-Dichlorophenol	<95.63	1528	1546	101	1531	100	1	56-131	30	
Diethyl phthalate	<95.63	1528	1578	103	1531	101	2	51-126	30	
Dimethyl phthalate	<95.63	1528	1550	101	1531	101	0	56-120	30	
2,4-Dimethylphenol	<95.63	1528	1091	71	1531	85	18	49-124	30	
4,6-Dinitro-2-methyl phenol	<95.63	1528	2148	141	1531	134	5	1-187	30	
2,4-Dinitrophenol	<191.3	1528	2214	145	1531	133	9	4-200	30	
2,4-Dinitrotoluene	<95.63	1528	1750	115	1531	108	6	57-138	30	
2,6-Dinitrotoluene	<95.63	1528	1725	113	1531	110	3	61-136	30	
Fluoranthene	<95.63	1528	1720	113	1531	106	6	40-155	30	
Fluorene	<95.63	1528	1533	100	1531	99	1	55-128	30	
Hexachlorobenzene	<95.63	1528	1456	95	1531	97	2	52-129	30	
Hexachlorobutadiene	<95.63	1528	1471	96	1531	95	1	50-128	30	
Hexachlorocyclopentadiene	<95.63	1528	1779	116	1531	112	4	13-144	30	
Hexachloroethane	<95.63	1528	1466	96	1531	98	2	42-117	30	
Indeno(1,2,3-c,d)pyrene	<95.63	1528	1891	124	1531	127	2	48-135	30	
Isophorone	<95.63	1528	1460	96	1531	95	1	51-114	30	
2-Methylnaphthalene	<95.63	1528	1447	95	1531	95	0	49-130	30	
2-Methylphenol	<95.63	1528	1497	98	1531	98	0	54-119	30	
3&4-Methylphenol	<95.63	1528	1521	100	1531	100	0	50-115	30	
4-Nitroaniline	<95.63	1528	1846	121	1531	110	10	50-133	30	
3-Nitroaniline	<95.63	1528	1691	111	1531	105	6	49-133	30	
2-Nitroaniline	<191.3	1528	1776	116	1531	112	4	53-133	30	
Nitrobenzene	<95.63	1528	1444	95	1531	95	0	48-113	30	

atrix Spike Percent Recovery [D] = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10061007

Prep Batch

Lab Batch ID: 83102

Reporting Units: ug/kg

Date Prepared: 06/15/2010

Date Analyzed: 06/15/2010

Client Sample Id:

Sample ID: 10061007-002.S

Method: SW3550/SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

TCL Semivolatile Organic Compounds		Analytes										
Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag		
<95.63	1528	1669	109	1531	1688	110	1	56-136	30			
<95.63	1528	1751	115	1531	1581	103	11	47-135	30			
<95.63	1528	1488	97	1531	1490	97	0	45-122	25			
<95.63	1528	1464	96	1531	1441	94	2	44-113	30			
<95.63	1528	1458	95	1531	1490	97	2	57-124	30			
<95.63	1528	1516	99	1531	1463	96	3	25-185	30			
<95.63	1528	1514	99	1531	1492	97	2	51-131	30			
<191.3	1528	1726	113	1531	1627	106	6	34-154	30			
<95.63	1528	1504	98	1531	1487	97	1	46-141	30			
<95.63	1528	1364	89	1531	1365	89	0	47-103	30			
<95.63	1528	1541	101	1531	1505	98	3	24-181	30			
<95.63	1528	1622	106	1531	1547	101	5	49-141	30			
<95.63	1528	1678	110	1531	1662	109	1	59-133	30			
<95.63	1528	1705	112	1531	1693	111	1	61-138	30			

atrix Spike Percent Recovery [D] = 100*(C-A)/B

atrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

= RPD exceeded the laboratory control limits

= Recovery of MS, MSD or both outside of QC Criteria

F = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

ANALYTICAL REPORT

REVISED

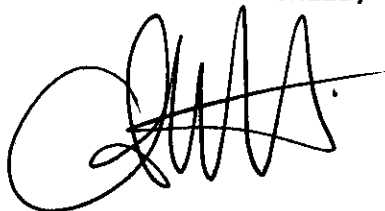
Phase Sep Science East Station

Lot #: COF110493 - B

John Slowikowski

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.



Christina M. Kovitch
Project Manager

June 25, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture	(#P330-10-00139)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW HW	X X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002319)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203010)	WW -	X -
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pttsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0F110493-B

Sample Receiving:

TestAmerica Pittsburgh received samples on June 11, 2010. The cooler was received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

OPP's:

All compounds <20% RSD will use an average response factor curve if no visible improvement is accomplished using a curve. A curve will be used for a compound where it is determined to be the "best-fit" evaluation.

General Chemistry:

There were no problems associated with the analysis.

REVISSED \$40

Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Dulles Executive National Plaza
Dulles, MD 21228
Phone: (410) 747-5770
Fax: (410) 788-5723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Crownsville, MD 21228
Contact: Kim Ivers
Phone: 410-469-0883

W.O. No.: 10061887
P.O. No.:
Project Name: Guido
Project Number: N/A

For Questions or Issues please contact: John Storz/lowell

Report Due On : 07/01/10 05:00

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analysis Required	Method	Type of Container	Preservative
10061887-001	Guido-NW2A-00-11 to 14	06/08/10	1150	SOLID	Organophosphorus Compounds	SW8161A	4 OZ WAF GLASS	COOL
10061887-002	Guido-NW2B-00-11 to 14	06/08/10	1430	SOLID	Organophosphorus Compounds	SW8161A	4 OZ WAF GLASS	COOL

Data Deliverables Required: Results, copy of COC and OC

Perform Q.C. on Sample :

Send Report Aith :

Altell No.: _____ Carrier: _____

Condition Upon Receipt: _____

Comments: _____

Samples Requisitioned By: _____ Date: _____ Time: _____ Samples Received By: _____

Samples Requisitioned By: _____ Date: _____ Time: _____ Samples Received By: _____

Samples Requisitioned By: _____ Date: 6/11/10 Time: 10:30 Samples Received By: _____

Sub-Contractor: Test America

Method: SW8161A

Matrix: SOLID

Analyte Name: Parathion, Ethyl Disophtorate

Parathion, Methyl Phosam

Disulfoton ZINOPHOS

METHODS SUMMARY

COF110493

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Organophosphorous Compounds by GC	SW846 8141A	SW846 3541
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

COF110493

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L2RPG	002	10061007-001	06/08/10	10:30
L2RPJ	003	10061007-002	06/08/10	14:30

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10061007-001

GC Semivolatiles

Lot--Sample #...: C0F110493-002 Work Order #...: L2RPG1AA Matrix.....: SOLID
 Date Sampled...: 06/08/10 Date Received...: 06/11/10 MS Run #.....: 0164019
 Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0164044 Analysis Time...: 05:46
 Dilution Factor: 0.99
 % Moisture.....: 16 Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Phorate	ND	39	ug/kg
Disulfoton	ND	39	ug/kg
Methyl parathion	ND	39	ug/kg
Famphur	ND	39	ug/kg
Dimethoate	ND	39	ug/kg
Parathion	ND	39	ug/kg
Thionazin	ND	39	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Triphenyl phosphate	98	(47 - 130)	
Tributyl phosphate	87	(55 - 125)	

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10061007-002

GC Semivolatiles

Lot-Sample #...: C0F110493-003 Work Order #...: L2RPJ1AA Matrix.....: SOLID
 Date Sampled...: 06/08/10 Date Received...: 06/11/10 MS Run #.....: 0164019
 Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0164044 Analysis Time...: 06:13
 Dilution Factor: 1
 % Moisture.....: 13 Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Phorate	ND	38	ug/kg
Disulfoton	ND	38	ug/kg
Methyl parathion	ND	38	ug/kg
Famphur	ND	38	ug/kg
Dimethoate	ND	38	ug/kg
Parathion	ND	38	ug/kg
Thionazin	ND	38	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Triphenyl phosphate	105	(47 - 130)	
Tributyl phosphate	99	(55 - 125)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10061007-001

General Chemistry

Lot-Sample #...: COF110493-002 Work Order #...: L2RPG Matrix.....: SOLID
Date Sampled...: 06/08/10 Date Received...: 06/11/10
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	83.8	1.0	%	SM20 2540G	06/13-06/14/10	0163039
		Dilution Factor: 1		Analysis Time...: 08:00	MS Run #.....: 0163028	

Phase Separation Sciences

Client Sample ID: 10061007-002

General Chemistry

Lot-Sample #...: COF110493-003 Work Order #...: L2RPJ Matrix.....: SOLID
Date Sampled...: 06/08/10 Date Received..: 06/11/10
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	86.5	1.0	%	SM20 2540G	06/13-06/14/10	0163039
		Dilution Factor: 1		Analysis Time...: 08:00	MS Run #.....: 0163028	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: C0F110493
 MB Lot-Sample #: C0F130000-044

Work Order #...: L2VHE1AA

Matrix.....: SOLID

Analysis Date...: 06/24/10
 Dilution Factor: 1

Prep Date.....: 06/14/10
 Prep Batch #...: 0164044

Analysis Time...: 06:40

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Phorate	ND	33	ug/kg	SW846 8141A
Disulfoton	ND	33	ug/kg	SW846 8141A
Methyl parathion	ND	33	ug/kg	SW846 8141A
Famphur	ND	33	ug/kg	SW846 8141A
Dimethoate	ND	33	ug/kg	SW846 8141A
Thionazin	ND	33	ug/kg	SW846 8141A
Parathion	ND	33	ug/kg	SW846 8141A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Triphenyl phosphate	92	(47 - 130)
Tributyl phosphate	84	(55 - 125)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F110493 Work Order #...: L2VHE1AC Matrix.....: SOLID
 LCS Lot-Sample#: C0F130000-044
 Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0164044 Analysis Time...: 07:06
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Phorate	117	(41 - 143)	SW846 8141A
Disulfoton	116	(31 - 136)	SW846 8141A
Methyl parathion	122	(43 - 146)	SW846 8141A
Famphur	129	(54 - 137)	SW846 8141A
Dimethoate	109	(40 - 143)	SW846 8141A
Thionazin	122	(48 - 126)	SW846 8141A
Parathion	123	(52 - 133)	SW846 8141A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Triphenyl phosphate	106	(47 - 130)
Tributyl phosphate	115	(55 - 125)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F110493 Work Order #...: L2RN81AD-MS Matrix.....: SOLID
 MS Lot-Sample #: C0F110493-001 L2RN81AE-MSD
 Date Sampled...: 06/03/10 Date Received...: 06/11/10 MS Run #.....: 0164019
 Prep Date.....: 06/14/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0164044 Analysis Time...: 04:53
 Dilution Factor: 1 % Moisture.....: 15

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Phorate	94	(41 - 143)			SW846 8141A
	95	(41 - 143)	1.1	(0-30)	SW846 8141A
Disulfoton	93	(31 - 136)			SW846 8141A
	95	(31 - 136)	2.8	(0-30)	SW846 8141A
Methyl parathion	120	(43 - 146)			SW846 8141A
	121	(43 - 146)	0.79	(0-30)	SW846 8141A
Famphur	107	(54 - 137)			SW846 8141A
	109	(54 - 137)	2.1	(0-30)	SW846 8141A
Dimethoate	101	(40 - 143)			SW846 8141A
	102	(40 - 143)	1.2	(0-30)	SW846 8141A
Thionazin	102	(48 - 126)			SW846 8141A
	104	(48 - 126)	1.9	(0-27)	SW846 8141A
Parathion	118	(52 - 133)			SW846 8141A
	120	(52 - 133)	0.93	(0-30)	SW846 8141A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Triphenyl phosphate	93	(47 - 130)
	95	(47 - 130)
Tributyl phosphate	96	(55 - 125)
	96	(55 - 125)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

ANALYTICAL REPORT

PROJECT NO. 10061007

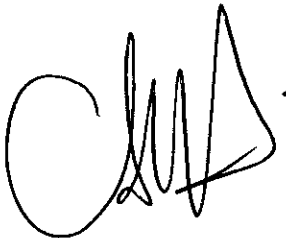
Phase Sep Science East Station

Lot #: COH260600

Betsy Orr

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.



Christina M. Kovitch
Project Manager

September 1, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture	(#P330-10-00139)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW HW	X X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002319)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203010)	WW –	X –
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pttsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0H260600

Sample Receiving:

TestAmerica Pittsburgh received samples on June 11, 2010. The cooler was received within the proper temperature range.

This is a re-log of Lot # C0F110493. The client requested that samples 10061007-001 10061007-002 be re-logged for sulfide analysis. The client is aware that these samples will be analyzed outside of holding time.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

General Chemistry:

There were no problems associated with the analysis.

REVISSED
Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Catonsville, MD 21228
Contact: Ken Ives
Phone: 410-869-0085

W.O. No.: 10061007
P.O. No.:
Project Name: Guide
Project Number: N/A

For Questions or issues please contact: John Slowikowski


Report Due On : 07/01/10 05:00

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
10061007-001	Guide-MW2A-SO-12 to 14	06/08/10	10:30	SOLID	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10061007-002	Guide-MW2B-SO-14 to 16	06/09/10	14:30	SOLID	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL

Data Deliverables Required: Results, copy of COC and QC
Send Report Attn : _____ **Perform Q.C. on Sample :** _____

Airbill No.: _____ Carrier: _____
Condition Upon Receipt: _____
Comments: _____

Samples Relinquished By: _____ Date: _____ Time: _____ Samples Received By: _____
Samples Relinquished By: _____ Date: _____ Time: _____ Samples Received By: _____
Samples Relinquished By: _____ Date: 6/11/10 Time: 10:30 Samples Received By: _____

 Sub-Contractor: Test America Method: SW8141A Matrix: SOLID Analyte Name: Parathion, Ethyl Dimethoate, Fomphur, Parathion, Methyl Phorate, Disulfoton, ZINOPHOS

METHODS SUMMARY

C0H260600

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C0H260600

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L569J	001	10061007-001	06/08/10	10:30
L569K	002	10061007-002	06/08/10	02:30

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10061007-001

General Chemistry

Lot-Sample #...: C0H260600-001 Work Order #...: L569J Matrix.....: SOLID
Date Sampled...: 06/08/10 Date Received...: 06/11/10
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	83.8	1.0	%	SM20 2540G	06/13-06/14/10	0239021
		Dilution Factor: 1		Analysis Time..: 00:00	MS Run #.....:	
Total Sulfide	ND	35.8	mg/kg	SW846 9030B/9034	08/31/10	0243191
		Dilution Factor: 1		Analysis Time..: 14:35	MS Run #.....:	0243130

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10061007-002

General Chemistry

Lot-Sample #...: C0H260600-002 Work Order #...: L569K Matrix.....: SOLID
 Date Sampled...: 06/08/10 Date Received...: 06/11/10
 % Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	86.5	1.0	%	SM20 2540G	06/13-06/14/10	0239021
				Dilution Factor: 1	Analysis Time..: 00:00	MS Run #.....:
Total Sulfide	ND	34.7	mg/kg	SW846 9030B/9034	08/31/10	0243191
				Dilution Factor: 1	Analysis Time..: 14:35	MS Run #.....: 0243130

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H260600

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Sulfide	ND	Work Order #: L6CC21AA 30.0	mg/kg	MB Lot-Sample #: SW846 9030B/9034	C0H310000-191 08/31/10	0243191
		Dilution Factor: 1				
		Analysis Time..: 14:35				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H260600

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide	102	(85 - 115)	SW846 9030B/9034	08/31/10	0243191
		Dilution Factor: 1		Analysis Time.: 14:35	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H260600

Matrix.....: SOLID

Date Sampled...: 08/25/10

Date Received...: 08/26/10

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide							
	85	(75 - 125)			SW846 9030B/9034	08/31/10	0243191
	86	(75 - 125)	1.1	(0-20)	SW846 9030B/9034	08/31/10	0243191
					Dilution Factor: 1		
					Analysis Time...: 14:35		
					MS Run #.....: 0243130		

% Moisture.....: 84

WO#: L56TK1CQ-MS/L56TK1CR-MSD MS Lot-Sample #: C0H260547-001

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

Analytical Report for

EA Engineering

Certificate of Analysis No.: 10062115

Project Manager: Pete Lekas

Project Name : Gude Landfill

Project Location: Rockville, MD



July 15, 2010

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL
PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047

PHASE SEPARATION SCIENCE, INC.



July 15, 2010

Pete Lekas
EA Engineering
15 Loveton Circle
Sparks, MD 21152

Reference: PSS Work Order No: **10062115**
Project Name : Gude Landfill
Project Location: Rockville, MD

Dear Pete Lekas :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **10062115**.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on August 20, 2010. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Dan Prucnal
Laboratory Manager



Case Narrative Summary

Client Name: EA Engineering

Project Name: Gude Landfill

Project ID: N/A

Work Order Number: 10062115

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/21/2010 at 04:06 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
10062115-001	Gude-MW3A-SO- 0 to 2	SOIL	06/18/2010 10:50
10062115-002	Gude-MW3B-SO- 12 to 14	SOIL	06/18/2010 13:30
10062115-003	Gude-SO-DUP-2	SOIL	06/18/2010 12:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in the Sample Receipt Checklist.

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Narrative Comments:

Closing CCV has a Hg recovery of 120%, limits 90-110%
Closing CCB has a Hg recovery of 0.14ppb, limit 0.10ppb.

Notes:

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than one-half of the reporting limit.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect.
An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Total Metals Analytical Method: SW846 6020 Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Arsenic	4.5	mg/kg	0.6		1	0.3	06/23/10	06/24/10 22:50	1033
Barium	39	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Beryllium	ND	mg/kg	3.0		1	1.5	06/23/10	06/25/10 19:19	1033
Cadmium	ND	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Chromium	32	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Cobalt	7.5	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Copper	25	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Lead	15	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Mercury	0.06	mg/kg	0.12		1	0.06	06/23/10	06/25/10 19:19	1033
Nickel	15	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Selenium	ND	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Silver	ND	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Thallium	ND	mg/kg	2.4		1	1.2	06/23/10	06/24/10 22:50	1033
Tin	ND	mg/kg	5.9		1	3	06/23/10	06/24/10 22:50	1033
Vanadium	35	mg/kg	3.0		1	1.5	06/23/10	06/24/10 22:50	1033
Zinc	110	mg/kg	12		1	5.9	06/23/10	06/24/10 22:50	1033

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
beta-BHC	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
delta-BHC	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Heptachlor	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Aldrin	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
gamma-Chlordane	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
alpha-Chlordane	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
4,4-DDE	13	ug/kg	24	J	1	12	06/22/10	06/23/10 10:56	1029
Endosulfan I	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Dieldrin	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Endrin	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
4,4-DDD	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Endosulfan II	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
4,4-DDT	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Endrin aldehyde	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Methoxychlor	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Endrin ketone	ND	ug/kg	24		1	12	06/22/10	06/23/10 10:56	1029
Toxaphene	ND	ug/kg	240		1	120	06/22/10	06/23/10 10:56	1029
Chlordane	ND	ug/kg	240		1	120	06/22/10	06/23/10 10:56	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 12:35	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	230		1	120	06/22/10	06/24/10 17:14	1029
2,4,5-TP (Silvex)	ND	ug/kg	23		1	12	06/22/10	06/24/10 17:14	1029
2,4,5-T	ND	ug/kg	23		1	12	06/22/10	06/24/10 17:14	1029
Dinoseb	ND	ug/kg	120		1	59	06/22/10	06/24/10 17:14	1029

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CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Chloromethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Vinyl Chloride	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Bromomethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Chloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Acetone	12	ug/kg	22	J	1	11	06/22/10	06/22/10 14:17	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Methylene chloride	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Vinyl acetate	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
2-Butanone (MEK)	ND	ug/kg	22		1	11	06/22/10	06/22/10 14:17	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Bromochloromethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Chloroform	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Benzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Dibromomethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Carbon Disulfide	ND	ug/kg	11		1	5.5	06/22/10	06/22/10 14:17	1035
Trichloroethene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Acrylonitrile	ND	ug/kg	22		1	11	06/22/10	06/22/10 14:17	1035
Bromodichloromethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	22		1	11	06/22/10	06/22/10 14:17	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Toluene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
2-Hexanone (MBK)	ND	ug/kg	22		1	11	06/22/10	06/22/10 14:17	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Dibromochloromethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Acrolein	ND	ug/kg	22		1	11	06/22/10	06/22/10 14:17	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Bromoform	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Tetrachloroethene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Chlorobenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Ethylbenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
m&p-Xylene	ND	ug/kg	11		1	5.5	06/22/10	06/22/10 14:17	1035
Styrene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
o-Xylene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	44		1	22	06/22/10	06/22/10 14:17	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Iodomethane	ND	ug/kg	22		1	11	06/22/10	06/22/10 14:17	1035
Naphthalene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.7	06/22/10	06/22/10 14:17	1035
Hexanal (TIC)	11	ug/kg	11		1	5.5	06/22/10	06/22/10 14:17	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Acenaphthylene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Acetophenone	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Anthracene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Benzo(a)anthracene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Benzo(a)pyrene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Benzo(b)fluoranthene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Benzo(g,h,i)perylene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Benzo(k)fluoranthene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Benzyl butyl phthalate	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
bis(2-chloroethyl) ether	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
4-Bromophenylphenyl ether	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Di-n-butyl phthalate	ND	ug/kg	400		1	200	06/28/10	06/28/10 20:06	1040
4-Chloro-3-methylphenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
4-Chloroaniline	ND	ug/kg	400		1	200	06/28/10	06/28/10 20:06	1040
2-Chloronaphthalene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2-Chlorophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Chrysene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Dibenz(a,h)anthracene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Dibenzofuran	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
3,3-Dichlorobenzidine	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2,4-Dichlorophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Diethyl phthalate	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Dimethyl phthalate	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2,4-Dimethylphenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040

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CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	400		1	200	06/28/10	06/28/10 20:06	1040
2,4-Dinitrotoluene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2,6-Dinitrotoluene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Fluoranthene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Fluorene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Hexachlorobenzene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Hexachlorobutadiene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Hexachlorocyclopentadiene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Hexachloroethane	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Isophorone	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2-Methylnaphthalene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2-Methylphenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
3&4-Methylphenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
4-Nitroaniline	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
3-Nitroaniline	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2-Nitroaniline	ND	ug/kg	400		1	200	06/28/10	06/28/10 20:06	1040
Nitrobenzene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2-Nitrophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
4-Nitrophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
N-Nitrosodimethylamine	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
N-Nitrosodiphenylamine	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Di-n-octyl phthalate	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Pentachlorophenol	ND	ug/kg	400		1	200	06/28/10	06/28/10 20:06	1040
Phenanthrene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Phenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
Pyrene	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040

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CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3A-SO- 0 to 2 **Date/Time Sampled: 06/18/2010 10:50** **PSS Sample ID: 10062115-001**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 82**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
2,4,5-Trichlorophenol	ND	ug/kg	200		1	100	06/28/10	06/28/10 20:06	1040
7-Nonenamide (TIC)	490	ug/kg	160		1	100	06/28/10	06/28/10 20:06	1040
unknown (TIC)	180	ug/kg	160		1	100	06/28/10	06/28/10 20:06	1040
Squalene (TIC)	260	ug/kg	160		1	100	06/28/10	06/28/10 20:06	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	07/01/10	07/01/10 17:19	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 Date/Time Sampled: 06/18/2010 13:30 PSS Sample ID: 10062115-002
Matrix: SOIL Date/Time Received: 06/21/2010 16:06 % Solids: 73

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Arsenic	3.4	mg/kg	0.5		1	0.3	06/23/10	06/24/10 22:57	1033
Barium	62	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Beryllium	1.3	mg/kg	2.5		1	1.3	06/23/10	06/25/10 19:26	1033
Cadmium	ND	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Chromium	32	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Cobalt	17	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Copper	56	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Lead	14	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Mercury	0.09	mg/kg	0.10		1	0.05	06/23/10	06/25/10 19:26	1033
Nickel	28	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Selenium	ND	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Silver	ND	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Thallium	ND	mg/kg	2.0		1	1	06/23/10	06/24/10 22:57	1033
Tin	ND	mg/kg	5.0		1	2.5	06/23/10	06/24/10 22:57	1033
Vanadium	33	mg/kg	2.5		1	1.3	06/23/10	06/24/10 22:57	1033
Zinc	91	mg/kg	10		1	5	06/23/10	06/24/10 22:57	1033

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 **Date/Time Sampled: 06/18/2010 13:30** **PSS Sample ID: 10062115-002**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 73**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
gamma-BHC (Lindane)	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
beta-BHC	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
delta-BHC	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Heptachlor	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Aldrin	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Heptachlor epoxide	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
gamma-Chlordane	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
alpha-Chlordane	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
4,4-DDE	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Endosulfan I	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Dieldrin	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Endrin	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
4,4-DDD	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Endosulfan II	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
4,4-DDT	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Endrin aldehyde	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Methoxychlor	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Endosulfan sulfate	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Endrin ketone	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:24	1029
Toxaphene	ND	ug/kg	260		1	130	06/22/10	06/23/10 11:24	1029
Chlordane	ND	ug/kg	260		1	130	06/22/10	06/23/10 11:24	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 Date/Time Sampled: 06/18/2010 13:30 PSS Sample ID: 10062115-002
Matrix: SOIL Date/Time Received: 06/21/2010 16:06 % Solids: 73

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	06/24/10	06/25/10 13:04	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	270		1	140	06/22/10	06/24/10 17:47	1029
2,4,5-TP (Silvex)	ND	ug/kg	27		1	14	06/22/10	06/24/10 17:47	1029
2,4,5-T	ND	ug/kg	27		1	14	06/22/10	06/24/10 17:47	1029
Dinoseb	ND	ug/kg	140		1	68	06/22/10	06/24/10 17:47	1029

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CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 **Date/Time Sampled: 06/18/2010 13:30** **PSS Sample ID: 10062115-002**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 73**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Chloromethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Vinyl Chloride	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Bromomethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Chloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Acetone	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035
Trichlorofluoromethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,1-Dichloroethene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Methylene chloride	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
trans-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,1-Dichloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Vinyl acetate	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
2-Butanone (MEK)	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035
cis-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Bromochloromethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Chloroform	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
2,2-Dichloropropane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,1,1-Trichloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,2-Dichloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,1-Dichloropropene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Carbon tetrachloride	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Benzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Dibromomethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,2-Dichloropropane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Carbon Disulfide	ND	ug/kg	11		1	5.5	06/22/10	06/22/10 15:15	1035
Trichloroethene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Acrylonitrile	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035
Bromodichloromethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
cis-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 **Date/Time Sampled: 06/18/2010 13:30** **PSS Sample ID: 10062115-002**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 73**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,1,2-Trichloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Toluene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,3-Dichloropropane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
2-Hexanone (MBK)	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035
1,2-Dibromoethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Dibromochloromethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Acrolein	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Bromoform	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Tetrachloroethene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Chlorobenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Ethylbenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
m&p-Xylene	ND	ug/kg	11		1	5.5	06/22/10	06/22/10 15:15	1035
Styrene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
o-Xylene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,2,3-Trichloropropane	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,3-Dichlorobenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,4-Dichlorobenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,2-Dichlorobenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	44		1	22	06/22/10	06/22/10 15:15	1035
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
Iodomethane	ND	ug/kg	22		1	11	06/22/10	06/22/10 15:15	1035
Naphthalene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	2.8	06/22/10	06/22/10 15:15	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 **Date/Time Sampled: 06/18/2010 13:30** **PSS Sample ID: 10062115-002**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 73**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Acenaphthylene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Acetophenone	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Anthracene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Benzo(a)anthracene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Benzo(a)pyrene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Benzo(b)fluoranthene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Benzo(g,h,i)perylene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Benzo(k)fluoranthene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Benzyl butyl phthalate	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
bis(2-chloroethoxy) methane	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
bis(2-chloroethyl) ether	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
4-Bromophenylphenyl ether	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Di-n-butyl phthalate	ND	ug/kg	460		1	230	06/28/10	06/28/10 20:36	1040
4-Chloro-3-methylphenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
4-Chloroaniline	ND	ug/kg	460		1	230	06/28/10	06/28/10 20:36	1040
2-Chloronaphthalene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2-Chlorophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Chrysene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Dibenz(a,h)anthracene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Dibenzofuran	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
3,3-Dichlorobenzidine	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2,4-Dichlorophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Diethyl phthalate	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Dimethyl phthalate	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2,4-Dimethylphenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 **Date/Time Sampled: 06/18/2010 13:30** **PSS Sample ID: 10062115-002**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 73**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	460		1	230	06/28/10	06/28/10 20:36	1040
2,4-Dinitrotoluene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2,6-Dinitrotoluene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Fluoranthene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Fluorene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Hexachlorobenzene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Hexachlorobutadiene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Hexachlorocyclopentadiene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Hexachloroethane	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Isophorone	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2-Methylnaphthalene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2-Methylphenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
3&4-Methylphenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
4-Nitroaniline	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
3-Nitroaniline	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2-Nitroaniline	ND	ug/kg	460		1	230	06/28/10	06/28/10 20:36	1040
Nitrobenzene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2-Nitrophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
4-Nitrophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
N-Nitrosodimethylamine	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
N-Nitrosodiphenylamine	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Di-n-octyl phthalate	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Pentachlorophenol	ND	ug/kg	460		1	230	06/28/10	06/28/10 20:36	1040
Phenanthrene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Phenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Pyrene	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW3B-SO- 12 to 14 **Date/Time Sampled: 06/18/2010 13:30** **PSS Sample ID: 10062115-002**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 73**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
2,4,5-Trichlorophenol	ND	ug/kg	230		1	110	06/28/10	06/28/10 20:36	1040
Erucylamide (TIC)	350	ug/kg	180		1	110	06/28/10	06/28/10 20:36	1040
unknown (TIC)	220	ug/kg	180		1	110	06/28/10	06/28/10 20:36	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.4		1	1.7	07/01/10	07/01/10 17:19	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Total Metals Analytical Method: SW846 6020 Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Arsenic	3.3	mg/kg	0.6		1	0.3	06/23/10	06/24/10 23:04	1033
Barium	50	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Beryllium	ND	mg/kg	3.2		1	1.6	06/23/10	06/25/10 19:32	1033
Cadmium	ND	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Chromium	28	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Cobalt	15	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Copper	39	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Lead	12	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Mercury	0.10	mg/kg	0.13		1	0.06	06/23/10	06/25/10 19:32	1033
Nickel	23	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Selenium	ND	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Silver	ND	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Thallium	ND	mg/kg	2.6		1	1.3	06/23/10	06/24/10 23:04	1033
Tin	ND	mg/kg	6.4		1	3.2	06/23/10	06/24/10 23:04	1033
Vanadium	31	mg/kg	3.2		1	1.6	06/23/10	06/24/10 23:04	1033
Zinc	70	mg/kg	13		1	6.4	06/23/10	06/24/10 23:04	1033

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
gamma-BHC (Lindane)	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
beta-BHC	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
delta-BHC	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Heptachlor	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Aldrin	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Heptachlor epoxide	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
gamma-Chlordane	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
alpha-Chlordane	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
4,4-DDE	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Endosulfan I	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Dieldrin	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Endrin	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
4,4-DDD	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Endosulfan II	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
4,4-DDT	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Endrin aldehyde	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Methoxychlor	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Endosulfan sulfate	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Endrin ketone	ND	ug/kg	26		1	13	06/22/10	06/23/10 11:52	1029
Toxaphene	ND	ug/kg	260		1	130	06/22/10	06/23/10 11:52	1029
Chlordane	ND	ug/kg	260		1	130	06/22/10	06/23/10 11:52	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

PCBs	Analytical Method: SW846 8082A	Preparation Method: SW846 3550
		Clean up Method: SW846 3665A
	Result	Units
	RL	Flag
	Dil	LOD
	Prepared	Analyzed
	Analyst	
PCB-1016	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	
PCB-1221	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	
PCB-1232	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	
PCB-1242	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	
PCB-1248	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	
PCB-1254	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	
PCB-1260	ND	mg/kg
	0.1	
	1	
	0.1	
	06/24/10	06/25/10 14:17
	1029	

Chlorinated Herbicides	Analytical Method: SW846 8151A
	Result
	Units
	RL
	Flag
	Dil
	LOD
	Prepared
	Analyzed
	Analyst
2,4-D	ND
	ug/kg
	270
	1
	130
	06/22/10
	06/24/10 18:19
	1029
2,4,5-TP (Silvex)	ND
	ug/kg
	27
	1
	13
	06/22/10
	06/24/10 18:19
	1029
2,4,5-T	ND
	ug/kg
	27
	1
	13
	06/22/10
	06/24/10 18:19
	1029
Dinoseb	ND
	ug/kg
	130
	1
	67
	06/22/10
	06/24/10 18:19
	1029

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CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Chloromethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Vinyl Chloride	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Bromomethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Chloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Acetone	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035
Trichlorofluoromethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,1-Dichloroethene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Methylene chloride	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
trans-1,2-Dichloroethene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,1-Dichloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Vinyl acetate	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
2-Butanone (MEK)	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035
cis-1,2-Dichloroethene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Bromochloromethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Chloroform	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
2,2-Dichloropropane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,1,1-Trichloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,2-Dichloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,1-Dichloropropene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Carbon tetrachloride	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Benzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Dibromomethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,2-Dichloropropane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Carbon Disulfide	ND	ug/kg	12		1	6	06/22/10	06/22/10 14:46	1035
Trichloroethene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Acrylonitrile	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035
Bromodichloromethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
cis-1,3-Dichloropropene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,1,2-Trichloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Toluene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,3-Dichloropropane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
2-Hexanone (MBK)	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035
1,2-Dibromoethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Dibromochloromethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Acrolein	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Bromoform	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Tetrachloroethene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Chlorobenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Ethylbenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
m&p-Xylene	ND	ug/kg	12		1	6	06/22/10	06/22/10 14:46	1035
Styrene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
o-Xylene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,2,3-Trichloropropane	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,3-Dichlorobenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,4-Dichlorobenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,2-Dichlorobenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	48		1	24	06/22/10	06/22/10 14:46	1035
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
Iodomethane	ND	ug/kg	24		1	12	06/22/10	06/22/10 14:46	1035
Naphthalene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	3	06/22/10	06/22/10 14:46	1035

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CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Acenaphthylene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Acetophenone	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Anthracene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Benzo(a)anthracene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Benzo(a)pyrene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Benzo(b)fluoranthene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Benzo(g,h,i)perylene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Benzo(k)fluoranthene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Benzyl butyl phthalate	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
bis(2-chloroethoxy) methane	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
bis(2-chloroethyl) ether	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
4-Bromophenylphenyl ether	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Di-n-butyl phthalate	ND	ug/kg	440		1	220	06/28/10	06/28/10 21:36	1040
4-Chloro-3-methylphenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
4-Chloroaniline	ND	ug/kg	440		1	220	06/28/10	06/28/10 21:36	1040
2-Chloronaphthalene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2-Chlorophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Chrysene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Dibenz(a,h)anthracene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Dibenzofuran	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
3,3-Dichlorobenzidine	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2,4-Dichlorophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Diethyl phthalate	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Dimethyl phthalate	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2,4-Dimethylphenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115

EA Engineering, Sparks, MD

July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	440		1	220	06/28/10	06/28/10 21:36	1040
2,4-Dinitrotoluene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2,6-Dinitrotoluene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Fluoranthene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Fluorene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Hexachlorobenzene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Hexachlorobutadiene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Hexachlorocyclopentadiene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Hexachloroethane	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Isophorone	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2-Methylnaphthalene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2-Methylphenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
3&4-Methylphenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
4-Nitroaniline	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
3-Nitroaniline	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2-Nitroaniline	ND	ug/kg	440		1	220	06/28/10	06/28/10 21:36	1040
Nitrobenzene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2-Nitrophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
4-Nitrophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
N-Nitrosodimethylamine	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
N-Nitrosodiphenylamine	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Di-n-octyl phthalate	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Pentachlorophenol	ND	ug/kg	440		1	220	06/28/10	06/28/10 21:36	1040
Phenanthrene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Phenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Pyrene	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040

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 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
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 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062115
 EA Engineering, Sparks, MD
 July 15, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP-2 **Date/Time Sampled: 06/18/2010 12:00** **PSS Sample ID: 10062115-003**
Matrix: SOIL **Date/Time Received: 06/21/2010 16:06** **% Solids: 75**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
2,4,5-Trichlorophenol	ND	ug/kg	220		1	110	06/28/10	06/28/10 21:36	1040
Squalene (TIC)	220	ug/kg	180		1	110	06/28/10	06/28/10 21:36	1040
9-Octadecenamide, (Z)- (TIC)	490	ug/kg	180		1	110	06/28/10	06/28/10 21:36	1040
2-Pentene, 4-methyl-, (Z)- (TIC)	210	ug/kg	180		1	110	06/28/10	06/28/10 21:36	1040
3-Penten-2-one (TIC)	560	ug/kg	180		1	110	06/28/10	06/28/10 21:36	1040
unknown (TIC)	600	ug/kg	180		1	110	06/28/10	06/28/10 21:36	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.3		1	1.7	07/01/10	07/01/10 17:19	1022



Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number 10062115 **Received By** Lynn Moran
Client Name EA Engineering **Date Received** 06/21/2010 04:06:00 PM
Project Name Gude Landfill **Delivered By** Client ✓
Project Number N/A **Tracking No** Not Applicable
Disposal Date: 08/20/2010 **Logged In By** Lynn Moran

Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seals	Not Applicable ✓	Temp (deg C)	2 ✓
Seal Condition	Not Applicable	Temp Blank Present	No

Documentation

COC agrees with sample labels? Yes or No **Sampler Name:** Joseph Sawicki ✓
Chain of Custody (COC) Yes or No **MD DW Cert. No.:** N/A

Sample Container

Appropriate for Specified Analysis? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Custody Seal(s)	Absent
Intact? <input checked="" type="checkbox"/>	Custody Seal(s) Intact?	Not Applicable ✓
Labeled and Labels Legible <input checked="" type="checkbox"/>	Seal(s) Signed / Dated	Not Applicable
Total No. of Samples Received 3	Total No. of Containers Received	24

Preservation

	Yes	No	N/A
Metals (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cyanides (pH>12)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sulfide (pH>9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOC, COD, Phenols (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOX, TKN, NH3, Total Phos (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOC, BTEX (VOA Vials Rcvd Preserved) (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do VOA vials have zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling.

Samples Inspected/Checklist Completed By: LM Date: 6/21/10
PM Review and Approval: [Signature] Date: 6/22/10

Analytical Data Package Information Summary for W.O 10062115

Report Prepared For: EA Engineering, Sparks, MD

Project Name: Gude Landfill

Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
AD2216A	Gude-MW3A-SO-0 to 2	Initial	10062115-001	1041	S	83319	83319	06/18/2010	06/21/2010	06/28/2010	06/28/2010
	Gude-MW3B-SO-12 to 14	Initial	10062115-002	1041	S	83319	83319	06/18/2010	06/21/2010	06/28/2010	06/28/2010
	Gude-SO-DUP-2	Initial	10062115-003	1041	S	83319	83319	06/18/2010	06/21/2010	06/28/2010	06/28/2010
	33335-1-BKS	BKS	33335-1-BKS	1033	S	33335	83293	-----	06/21/2010	06/23/2010	06/24/2010
	33335-1-BLK	BLK	33335-1-BLK	1033	S	33335	83293	-----	06/21/2010	06/23/2010	06/24/2010
	Gude-MW3A-SO-0 to 2	Initial	10062115-001	1033	S	33335	83293	06/18/2010	06/21/2010	06/23/2010	06/24/2010
	Gude-MW3B-SO-12 to 14	Initial	10062115-002	1033	S	33335	83293	06/18/2010	06/21/2010	06/23/2010	06/24/2010
	Gude-SO-DUP-2	Initial	10062115-003	1033	S	33335	83293	06/18/2010	06/21/2010	06/23/2010	06/24/2010
	Gude-SS1-SO-0 to 1	MS	10061114-001 S	1033	S	33335	83293	06/11/2010	06/21/2010	06/23/2010	06/24/2010
	Gude-SS1-SO-0 to 1 SD	MSD	10061114-001 SD	1033	S	33335	83293	06/11/2010	06/21/2010	06/23/2010	06/24/2010
SW846 6020	33335-1-BKS	BKS	33335-1-BKS	1033	S	33335	83322	-----	06/21/2010	06/23/2010	06/25/2010
	33335-1-BLK	BLK	33335-1-BLK	1033	S	33335	83322	-----	06/21/2010	06/23/2010	06/25/2010
	Gude-MW3A-SO-0 to 2 DL	Reanalysis	10062115-001	1033	S	33335	83322	06/18/2010	06/21/2010	06/23/2010	06/25/2010
	Gude-MW3B-SO-12 to 14 DL	Reanalysis	10062115-002	1033	S	33335	83322	06/18/2010	06/21/2010	06/23/2010	06/25/2010
	Gude-SO-DUP-2 DL	Reanalysis	10062115-003	1033	S	33335	83322	06/18/2010	06/21/2010	06/23/2010	06/25/2010
	33325-1-BKS	BKS	33325-1-BKS	1029	S	33325	83257	-----	06/21/2010	06/22/2010	06/23/2010
	33325-1-BLK	BLK	33325-1-BLK	1029	S	33325	83257	-----	06/21/2010	06/22/2010	06/23/2010
	33325-1-BSD	BSD	33325-1-BSD	1029	S	33325	83257	-----	06/21/2010	06/22/2010	06/23/2010
	Gude-SS5-SO-0 to 1 S	MS	10061114-005 S	1029	S	33325	83257	06/11/2010	06/21/2010	06/22/2010	06/23/2010
	Gude-SS5-SO-0 to 1 SD	MSD	10061114-005 SD	1029	S	33325	83257	06/11/2010	06/21/2010	06/22/2010	06/23/2010
SW846 8081B	Gude-MW3A-SO-0 to 2	Initial	10062115-001	1029	S	33325	83258	06/18/2010	06/21/2010	06/22/2010	06/23/2010
	Gude-MW3B-SO-12 to 14	Initial	10062115-002	1029	S	33325	83258	06/18/2010	06/21/2010	06/22/2010	06/23/2010
	Gude-SO-DUP-2	Initial	10062115-003	1029	S	33325	83258	06/18/2010	06/21/2010	06/22/2010	06/23/2010

Analytical Data Package Information Summary for W.O 10062115

Report Prepared For: EA Engineering, Sparks, MD

Project Name: Gude Landfill

Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8082A	33354-1-BKS	BKS	33354-1-BKS	1029	S	33354	83324	-----	06/21/2010	06/24/2010	06/25/2010
	33354-1-BLK	BLK	33354-1-BLK	1029	S	33354	83324	-----	06/21/2010	06/24/2010	06/25/2010
	33354-1-BSD	BSD	33354-1-BSD	1029	S	33354	83324	-----	06/21/2010	06/24/2010	06/25/2010
	Gude-MW3A-SO-0 to 2	Initial	10062115-001	1029	S	33354	83324	06/18/2010	06/21/2010	06/24/2010	06/25/2010
	Gude-MW3B-SO-12 to 14	Initial	10062115-002	1029	S	33354	83324	06/18/2010	06/21/2010	06/24/2010	06/25/2010
	Gude-MW3B-SO-12 to 14 S	MS	10062115-002 S	1029	S	33354	83324	06/18/2010	06/21/2010	06/24/2010	06/25/2010
	Gude-MW3B-SO-12 to 14 SD	MSD	10062115-002 SD	1029	S	33354	83324	06/18/2010	06/21/2010	06/24/2010	06/25/2010
	Gude-SO-DUP-2	Initial	10062115-003	1029	S	33354	83324	06/18/2010	06/21/2010	06/24/2010	06/25/2010
	33317-1-BKS	BKS	33317-1-BKS	1029	S	33317	83289	-----	06/21/2010	06/22/2010	06/25/2010
	33317-1-BLK	BLK	33317-1-BLK	1029	S	33317	83289	-----	06/21/2010	06/22/2010	06/24/2010
SW846 8151A	33317-1-BSD	BSD	33317-1-BSD	1029	S	33317	83289	-----	06/21/2010	06/22/2010	06/24/2010
	Gude-MW3A-SO-0 to 2	Initial	10062115-001	1029	S	33317	83289	06/18/2010	06/21/2010	06/22/2010	06/24/2010
	Gude-MW3B-SO-12 to 14	Initial	10062115-002	1029	S	33317	83289	06/18/2010	06/21/2010	06/22/2010	06/24/2010
	Gude-SO-DUP-2	Initial	10062115-003	1029	S	33317	83289	06/18/2010	06/21/2010	06/22/2010	06/24/2010
	33355-1-BKS	BKS	33355-1-BKS	1035	S	33355	83282	-----	06/21/2010	06/22/2010	06/22/2010
	33355-1-BLK	BLK	33355-1-BLK	1035	S	33355	83282	-----	06/21/2010	06/22/2010	06/22/2010
	33355-1-BSD	BSD	33355-1-BSD	1035	S	33355	83282	-----	06/21/2010	06/22/2010	06/22/2010
	Gude-MW3A-SO-0 to 2	Initial	10062115-001	1035	S	33355	83282	06/18/2010	06/21/2010	06/22/2010	06/22/2010
	Gude-MW3B-SO-12 to 14	Initial	10062115-002	1035	S	33355	83282	06/18/2010	06/21/2010	06/22/2010	06/22/2010
	Gude-SO-DUP-2	Initial	10062115-003	1035	S	33355	83282	06/18/2010	06/21/2010	06/22/2010	06/22/2010
SW846 8270C	33379-1-BKS	BKS	33379-1-BKS	1040	S	33379	83357	-----	06/21/2010	06/28/2010	06/28/2010

Analytical Data Package Information Summary for W.O 10062115

Report Prepared For: EA Engineering, Sparks, MD

Project Name: Gude Landfill

Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Batch	Sampled	Received	Prepared	Analyzed
SW846 8270C	33379-1-BLK	BLK	33379-1-BLK	1040	S	33379	83357		-----	06/21/2010	06/28/2010	06/28/2010
	33379-1-BSD	BSD	33379-1-BSD	1040	S	33379	83357		-----	06/21/2010	06/28/2010	06/28/2010
	B-1 4-8' S	MS	10062305-001 S	1040	S	33379	83357		06/22/2010	06/21/2010	06/28/2010	06/28/2010
	B-1 4-8' SD	MSD	10062305-001 SD	1040	S	33379	83357		06/22/2010	06/21/2010	06/28/2010	06/28/2010
	Gude-MW3A-SO- 0 to 2	Initial	10062115-001	1040	S	33379	83357		06/18/2010	06/21/2010	06/28/2010	06/28/2010
	Gude-MW3B-SO- 12 to 14	Initial	10062115-002	1040	S	33379	83357		06/18/2010	06/21/2010	06/28/2010	06/28/2010
	Gude-SO-DUP-2	Initial	10062115-003	1040	S	33379	83357		06/18/2010	06/21/2010	06/28/2010	06/28/2010
	83405-1-BKS	BKS	83405-1-BKS	1022	S	83405	83405		-----	06/21/2010	07/01/2010	07/01/2010
	83405-1-BLK	BLK	83405-1-BLK	1022	S	83405	83405		-----	06/21/2010	07/01/2010	07/01/2010
	83405-1-BSD	BSD	83405-1-BSD	1022	S	83405	83405		-----	06/21/2010	07/01/2010	07/01/2010
SW846 9014	Gude-MW3A-SO- 0 to 2	Initial	10062115-001	1022	S	83405	83405		06/18/2010	06/21/2010	07/01/2010	07/01/2010
	Gude-MW3A-SO- 0 to 2 S	MS	10062115-001 S	1022	S	83405	83405		06/18/2010	06/21/2010	07/01/2010	07/01/2010
	Gude-MW3A-SO- 0 to 2 SD	MSD	10062115-001 SD	1022	S	83405	83405		06/18/2010	06/21/2010	07/01/2010	07/01/2010
	Gude-MW3B-SO- 12 to 14	Initial	10062115-002	1022	S	83405	83405		06/18/2010	06/21/2010	07/01/2010	07/01/2010
	Gude-SO-DUP-2	Initial	10062115-003	1022	S	83405	83405		06/18/2010	06/21/2010	07/01/2010	07/01/2010



Blank Summary 10062115

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33317-1-BLK	Matrix: SOLID
Lab Sample Id: 33317-1-BLK	

Analytical Method: SW846 8151A		Prep Method: SW8151A_PREP					
Date Analyzed: Jun-24-10 15:05	Analyst: 1029	Date Prep: Jun-22-10 07:12	Tech: 1028				
	Seq Number: 83289						
Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2,4-D	94-75-7	ND	200	100	ug/kg	U	1
2,4,5-TP (Silvex)	93-72-1	ND	20	10	ug/kg	U	1
2,4,5-T	93-76-5	ND	20	10	ug/kg	U	1
Dinoseb	88-85-7	ND	100	50	ug/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33325-1-BLK
Lab Sample Id: 33325-1-BLK

Matrix: SOLID

Analytical Method: SW846 8081B

Prep Method: SW3550

Date Analyzed: Jun-23-10 10:56

Analyst: 1029

Date Prep: Jun-22-10 16:13

Tech: 1016

Seq Number: 83257

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
alpha-BHC	319-84-6	U	19.72	9.862	ug/kg	U	1
gamma-BHC (Lindane)	58-89-9	U	19.72	9.862	ug/kg	U	1
beta-BHC	319-85-7	U	19.72	9.862	ug/kg	U	1
delta-BHC	319-86-8	U	19.72	9.862	ug/kg	U	1
Heptachlor	76-44-8	U	19.72	9.862	ug/kg	U	1
Aldrin	309-00-2	U	19.72	9.862	ug/kg	U	1
Heptachlor epoxide	1024-57-3	U	19.72	9.862	ug/kg	U	1
gamma-Chlordane	5103-74-2	U	19.72	9.862	ug/kg	U	1
alpha-Chlordane	5103-71-9	U	19.72	9.862	ug/kg	U	1
4,4-DDE	72-55-9	U	19.72	9.862	ug/kg	U	1
Endosulfan I	959-98-8	U	19.72	9.862	ug/kg	U	1
Dieldrin	60-57-1	U	19.72	9.862	ug/kg	U	1
Endrin	72-20-8	U	19.72	9.862	ug/kg	U	1
4,4-DDD	72-54-8	U	19.72	9.862	ug/kg	U	1
Endosulfan H	33213-65-9	U	19.72	9.862	ug/kg	U	1
4,4-DDT	50-29-3	U	19.72	9.862	ug/kg	U	1
Endrin aldehyde	7421-93-4	U	19.72	9.862	ug/kg	U	1
Methoxychlor	72-43-5	U	19.72	9.862	ug/kg	U	1
Endosulfan sulfate	1031-07-8	U	19.72	9.862	ug/kg	U	1
Endrin ketone	53494-70-5	U	19.72	9.862	ug/kg	U	1
Toxaphene	8001-35-2	U	197.2	98.62	ug/kg	U	1
Chlordane	57-74-9	U	197.2	98.62	ug/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33354-1-BLK Matrix: SOLID
Lab Sample Id: 33354-1-BLK

Analytical Method: SW846 8082A

Prep Method: SW3550

Date Analyzed: Jun-25-10 09:41

Analyst: 1029

Date Prep: Jun-24-10 16:35

Tech: 1016

Seq Number: 83324

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
PCB-1016	12674-11-2	ND	0.1	0.0	mg/kg	U	1
PCB-1221	11104-28-2	ND	0.1	0.0	mg/kg	U	1
PCB-1232	11141-16-5	ND	0.1	0.0	mg/kg	U	1
PCB-1242	53469-21-9	ND	0.1	0.0	mg/kg	U	1
PCB-1248	12672-29-6	ND	0.1	0.0	mg/kg	U	1
PCB-1254	11097-69-1	ND	0.1	0.0	mg/kg	U	1
PCB-1260	11096-82-5	ND	0.1	0.0	mg/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33355-1-BLK

Matrix: SOLID

Lab Sample Id: 33355-1-BLK

Analytical Method: SW846 8260B

Prep Method: SW5035

Date Analyzed: Jun-22-10 13:37

Analyst: 1035

Date Prep: Jun-22-10 10:52

Tech: 1035

Seq Number: 83282

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	ND	5	2.5	ug/kg	U	1
Chloromethane	74-87-3	ND	5	2.5	ug/kg	U	1
Vinyl Chloride	75-01-4	ND	5	2.5	ug/kg	U	1
Bromomethane	74-83-9	ND	5	2.5	ug/kg	U	1
Chloroethane	75-00-3	ND	5	2.5	ug/kg	U	1
Acetone	67-64-1	ND	20	10	ug/kg	U	1
Trichlorofluoromethane	75-69-4	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethene	75-35-4	ND	5	2.5	ug/kg	U	1
Methylene chloride	75-09-2	ND	5	2.5	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethane	75-34-3	ND	5	2.5	ug/kg	U	1
Vinyl acetate	108-05-4	ND	5	2.5	ug/kg	U	1
2-Butanone (MEK)	78-93-3	ND	20	10	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	ND	5	2.5	ug/kg	U	1
Bromochloromethane	74-97-5	ND	5	2.5	ug/kg	U	1
Chloroform	67-66-3	ND	5	2.5	ug/kg	U	1
2,2-Dichloropropane	594-20-7	ND	5	2.5	ug/kg	U	1
1,1,1-Trichloroethane	71-55-6	ND	5	2.5	ug/kg	U	1
1,2-Dichloroethane	107-06-2	ND	5	2.5	ug/kg	U	1
1,1-Dichloropropene	563-58-6	ND	5	2.5	ug/kg	U	1
Carbon tetrachloride	56-23-5	ND	5	2.5	ug/kg	U	1
Benzene	71-43-2	ND	5	2.5	ug/kg	U	1
Dibromomethane	74-95-3	ND	5	2.5	ug/kg	U	1
1,2-Dichloropropane	78-87-5	ND	5	2.5	ug/kg	U	1
Carbon Disulfide	75-15-0	ND	10	5.0	ug/kg	U	1
Trichloroethene	79-01-6	ND	5	2.5	ug/kg	U	1
Acrylonitrile	107-13-1	ND	20	10	ug/kg	U	1
Bromodichloromethane	75-27-4	ND	5	2.5	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	5	2.5	ug/kg	U	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ND	20	10	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	ND	5	2.5	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	ND	5	2.5	ug/kg	U	1
Toluene	108-88-3	ND	5	2.5	ug/kg	U	1
1,3-Dichloropropane	142-28-9	ND	5	2.5	ug/kg	U	1
2-Hexanone (MBK)	591-78-6	ND	20	10	ug/kg	U	1
1,2-Dibromoethane	106-93-4	ND	5	2.5	ug/kg	U	1
Dibromochloromethane	124-48-1	ND	5	2.5	ug/kg	U	1
Acrolein	107-02-8	ND	20	10	ug/kg	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	5	2.5	ug/kg	U	1
Bromoform	75-25-2	ND	5	2.5	ug/kg	U	1
trans-1,4-dichloro-2-butene	110-57-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33355-1-BLK
Lab Sample Id: 33355-1-BLK

Matrix: SOLID

Analytical Method: SW846 8260B

Prep Method: SW5035

Date Analyzed: Jun-22-10 13:37

Analyst: 1035

Date Prep: Jun-22-10 10:52

Tech: 1035

Seq Number: 83282

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Tetrachloroethene	127-18-4	ND	5	2.5	ug/kg	U	1
Chlorobenzene	108-90-7	ND	5	2.5	ug/kg	U	1
Ethylbenzene	100-41-4	ND	5	2.5	ug/kg	U	1
m&p-Xylene	108-38-3	ND	10	5.0	ug/kg	U	1
Styrene	100-42-5	ND	5	2.5	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	2.5	ug/kg	U	1
o-Xylene	95-47-6	ND	5	2.5	ug/kg	U	1
1,2,3-Trichloropropane	96-18-4	ND	5	2.5	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	ND	5	2.5	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	ND	5	2.5	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	ND	5	2.5	ug/kg	U	1
1,2-Dibromo-3-chloropropane	96-12-8	ND	40	20	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	5	2.5	ug/kg	U	1
Iodomethane	74-88-4	ND	20	10	ug/kg	U	1
Naphthalene	91-20-3	ND	5	2.5	ug/kg	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33379-1-BLK
Lab Sample Id: 33379-1-BLK

Matrix: SOLID

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jun-28-10 16:36

Analyst: 1040

Date Prep: Jun-28-10 10:07

Tech: 1022

Seq Number: 83357

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Acenaphthene	83-32-9	ND	170	83	ug/kg	U	1
Acenaphthylene	208-96-8	ND	170	83	ug/kg	U	1
Acetophenone	98-86-2	ND	170	83	ug/kg	U	1
Anthracene	120-12-7	ND	170	83	ug/kg	U	1
Benzo(a)anthracene	56-55-3	ND	170	83	ug/kg	U	1
Benzo(a)pyrene	50-32-8	ND	170	83	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	ND	170	83	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	ND	170	83	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	ND	170	83	ug/kg	U	1
Benzyl butyl phthalate	85-68-7	ND	170	83	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	ND	170	83	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	ND	170	83	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	ND	170	83	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	ND	170	83	ug/kg	U	1
4-Bromophenylphenyl ether	101-55-3	ND	170	83	ug/kg	U	1
Di-n-butyl phthalate	84-74-2	ND	330	170	ug/kg	U	1
4-Chloro-3-methylphenol	59-50-7	ND	170	83	ug/kg	U	1
4-Chloroaniline	106-47-8	ND	330	170	ug/kg	U	1
2-Chloronaphthalene	91-58-7	ND	170	83	ug/kg	U	1
2-Chlorophenol	95-57-8	ND	170	83	ug/kg	U	1
4-Chlorophenyl phenyl ether	7005-72-3	ND	170	83	ug/kg	U	1
Chrysene	218-01-9	ND	170	83	ug/kg	U	1
Dibenz(a,h)anthracene	53-70-3	ND	170	83	ug/kg	U	1
Dibenzofuran	132-64-9	ND	170	83	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	ND	170	83	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	ND	170	83	ug/kg	U	1
Diethyl phthalate	84-66-2	ND	170	83	ug/kg	U	1
Dimethyl phthalate	131-11-3	ND	170	83	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	ND	170	83	ug/kg	U	1
4,6-Dinitro-2-methyl phenol	534-52-1	ND	170	83	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	ND	330	170	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	ND	170	83	ug/kg	U	1
2,6-Dinitrotoluene	606-20-2	ND	170	83	ug/kg	U	1
Fluoranthene	206-44-0	ND	170	83	ug/kg	U	1
Fluorene	86-73-7	ND	170	83	ug/kg	U	1
Hexachlorobenzene	118-74-1	ND	170	83	ug/kg	U	1
Hexachlorobutadiene	87-68-3	ND	170	83	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	ND	170	83	ug/kg	U	1
Hexachloroethane	67-72-1	ND	170	83	ug/kg	U	1
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	170	83	ug/kg	U	1
Isophorone	78-59-1	ND	170	83	ug/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33379-1-BLK
Lab Sample Id: 33379-1-BLK

Matrix: SOLID

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jun-28-10 16:36

Analyst: 1040

Date Prep: Jun-28-10 10:07

Tech: 1022

Seq Number: 83357

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2-Methylnaphthalene	91-57-6	ND	170	83	ug/kg	U	1
2-Methylphenol	95-48-7	ND	170	83	ug/kg	U	1
3&4-Methylphenol		ND	170	83	ug/kg	U	1
4-Nitroaniline	100-01-6	ND	170	83	ug/kg	U	1
3-Nitroaniline	99-09-2	ND	170	83	ug/kg	U	1
2-Nitroaniline	88-74-4	ND	330	170	ug/kg	U	1
Nitrobenzene	98-95-3	ND	170	83	ug/kg	U	1
2-Nitrophenol	88-75-5	ND	170	83	ug/kg	U	1
4-Nitrophenol	100-02-7	ND	170	83	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	ND	170	83	ug/kg	U	1
N-Nitrosodi-n-propylamine	621-64-7	ND	170	83	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	ND	170	83	ug/kg	U	1
Di-n-octyl phthalate	117-84-0	ND	170	83	ug/kg	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	170	83	ug/kg	U	1
Pentachlorophenol	87-86-5	ND	330	170	ug/kg	U	1
Phenanthrene	85-01-8	ND	170	83	ug/kg	U	1
Phenol	108-95-2	ND	170	83	ug/kg	U	1
Pyrene	129-00-0	ND	170	83	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	ND	170	83	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	ND	170	83	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	ND	170	83	ug/kg	U	1



Blank Summary 10062115

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: **83405-1-BLK** Matrix: **SOLID**
Lab Sample Id: **83405-1-BLK**

Analytical Method: SW846 9014		Prep Method:					
Date Analyzed: Jul-01-10 17:19		Analyst: 1022		Date Prep:		Tech: 1022	
		Seq Number: 83405					
Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Cyanide, Total	57-12-5	4.740	2.5	1.3	mg/kg		1



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83289

Sample: 10061803-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	63.0	50.00	126	40-165	

Lab Batch #: 83289

Sample: 10061803-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	64.6	50.00	129	40-165	

Lab Batch #: 83289

Sample: 10062115-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	49.4	50.00	99	40-165	

Lab Batch #: 83289

Sample: 10062115-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	69.1	50.00	138	40-165	

Lab Batch #: 83289

Sample: 10062115-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	55.4	50.00	111	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83289

Sample: 33317-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	48.2	50.00	96	40-165	

Lab Batch #: 83289

Sample: 33317-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	48.8	50.00	98	40-165	

Lab Batch #: 83289

Sample: 33317-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	48.9	50.00	98	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83324

Sample: 10062115-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.0	25.00	104	43-124	
Tetrachloro-m-xylene	18.7	25.00	75	44-97	

Lab Batch #: 83324

Sample: 10062115-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.8	25.00	95	43-124	
Tetrachloro-m-xylene	17.9	25.00	72	44-97	

Lab Batch #: 83324

Sample: 10062115-002 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	27.3	25.00	109	43-124	
Tetrachloro-m-xylene	19.2	25.00	77	44-97	

Lab Batch #: 83324

Sample: 10062115-002 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.8	25.00	95	43-124	
Tetrachloro-m-xylene	16.5	25.00	66	44-97	

Lab Batch #: 83324

Sample: 10062115-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.0	25.00	100	43-124	
Tetrachloro-m-xylene	20.1	25.00	81	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83324

Sample: 33354-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.3	25.00	93	43-124	
Tetrachloro-m-xylene	20.4	25.00	82	44-97	

Lab Batch #: 83324

Sample: 33354-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	22.2	25.00	89	43-124	U
Tetrachloro-m-xylene	20.4	25.00	82	44-97	U

Lab Batch #: 83324

Sample: 33354-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.0	25.00	96	43-124	
Tetrachloro-m-xylene	21.0	25.00	84	44-97	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/25/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83258

Sample: 10062115-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.5	25.00	106	55-143	
Tetrachloro-m-xylene	21.3	25.00	85	32-133	

Lab Batch #: 83258

Sample: 10062115-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	24.6	25.00	99	55-143	
Tetrachloro-m-xylene	21.0	25.00	84	32-133	

Lab Batch #: 83258

Sample: 10062115-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	25.3	25.00	101	55-143	
Tetrachloro-m-xylene	22.8	25.00	91	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/25/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83257

Sample: 10061114-005 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	24.2	25.00	97	55-143	
Tetrachloro-m-xylene	22.0	25.00	88	32-133	

Lab Batch #: 83257

Sample: 10061114-005 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.0	25.00	104	55-143	
Tetrachloro-m-xylene	21.6	25.00	87	32-133	

Lab Batch #: 83257

Sample: 33325-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	23.9	25.00	96	55-143	
Tetrachloro-m-xylene	23.6	25.00	94	32-133	

Lab Batch #: 83257

Sample: 33325-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	22.0	25.00	88	55-143	
Tetrachloro-m-xylene	21.1	25.00	84	32-133	

Lab Batch #: 83257

Sample: 33325-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	23.9	25.00	96	55-143	
Tetrachloro-m-xylene	23.4	25.00	94	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83357

Sample: 10062115-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	1970	3310	59	48-112	
2-Fluorophenol	4070	6630	61	45-107	
Nitrobenzene-d5	2110	3310	64	44-98	
Phenol-d6	4100	6630	62	38-100	
Terphenyl-D14	3190	3310	96	34-165	
2,4,6-Tribromophenol	4980	6630	75	44-104	

Lab Batch #: 83357

Sample: 10062115-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2420	3320	73	48-112	
2-Fluorophenol	4920	6650	74	45-107	
Nitrobenzene-d5	2640	3320	79	44-98	
Phenol-d6	5020	6650	76	38-100	
Terphenyl-D14	3180	3320	96	34-165	
2,4,6-Tribromophenol	5180	6650	78	44-104	

Lab Batch #: 83357

Sample: 10062115-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2830	3320	85	48-112	
2-Fluorophenol	5910	6640	89	45-107	
Nitrobenzene-d5	3060	3320	92	44-98	
Phenol-d6	5870	6640	88	38-100	
Terphenyl-D14	3420	3320	103	34-165	
2,4,6-Tribromophenol	5710	6640	86	44-104	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83357

Sample: 10062305-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2340	3320	70	48-112	
2-Fluorophenol	4730	6650	71	45-107	
Nitrobenzene-d5	2460	3320	74	44-98	
Phenol-d6	4770	6650	72	38-100	
Terphenyl-D14	3310	3320	100	34-165	
2,4,6-Tribromophenol	5460	6650	82	44-104	

Lab Batch #: 83357

Sample: 10062305-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2830	3320	85	48-112	
2-Fluorophenol	5740	6650	86	45-107	
Nitrobenzene-d5	3090	3320	93	44-98	
Phenol-d6	5750	6650	86	38-100	
Terphenyl-D14	3460	3320	104	34-165	
2,4,6-Tribromophenol	5890	6650	89	44-104	

Lab Batch #: 83357

Sample: 33379-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3060	3330	92	48-112	
2-Fluorophenol	6180	6660	93	45-107	
Nitrobenzene-d5	3240	3330	97	44-98	
Phenol-d6	6120	6660	92	38-100	
Terphenyl-D14	3280	3330	98	34-165	
2,4,6-Tribromophenol	5790	6660	87	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83357

Sample: 33379-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatle Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3030	3330	91	48-112	
2-Fluorophenol	6210	6660	93	45-107	
Nitrobenzene-d5	3350	3330	100	44-98	**
Phenol-d6	6210	6660	93	38-100	
Terphenyl-D14	4290	3330	129	34-165	
2,4,6-Tribromophenol	5840	6660	88	44-104	

Lab Batch #: 83357

Sample: 33379-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatle Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3200	3320	96	48-112	
2-Fluorophenol	6600	6650	99	45-107	
Nitrobenzene-d5	3430	3320	103	44-98	**
Phenol-d6	6480	6650	97	38-100	
Terphenyl-D14	3600	3320	108	34-165	
2,4,6-Tribromophenol	5780	6650	87	44-104	

Lab Batch #: 83282

Sample: 10062115-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.1	50.00	102	90-113	
Toluene-D8	50.1	50.00	100	90-108	
4-Bromofluorobenzene	49.7	50.00	99	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83282

Sample: 10062115-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.2	50.00	104	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	49.3	50.00	99	79-125	

Lab Batch #: 83282

Sample: 10062115-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.4	50.00	103	90-113	
Toluene-D8	50.1	50.00	100	90-108	
4-Bromofluorobenzene	50.4	50.00	101	79-125	

Lab Batch #: 83282

Sample: 33355-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	49.3	50.00	99	90-113	
Toluene-D8	50.8	50.00	102	90-108	
4-Bromofluorobenzene	47.3	50.00	95	79-125	

Lab Batch #: 83282

Sample: 33355-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	49.9	50.00	100	90-113	
Toluene-D8	49.7	50.00	99	90-108	
4-Bromofluorobenzene	50.1	50.00	100	79-125	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

07/29/2010

Work Order #: 10062115

Project ID: N/A

Lab Batch #: 83282

Sample: 33355-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	50.4	50.00	101	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	47.2	50.00	94	79-125	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: J

Lab Batch ID: 83289

Units: ug/kg

Sample: 33317-1-BKS
Method: SW8151A_PREP / SW8151

Project ID: N/A
Analyst: 1029
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Herbicides Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	2,4-D	<99.70	986.2	881.8	89	986.2	889.8	90	1	65-110	30
2,4,5-TP (Silvex)	<9.970	98.62	85.11	86	98.62	87.22	88	2	58-130	30	
2,4,5-T	<9.970	98.62	100	101	98.62	114.8	116	14	81-130	30	
Dimoseb	<49.85	493.1	397.1	81	493.1	399.6	81	0	62-102	30	

Sample: 83405-1-BKS
Method: / SW9014

Analyst: 1022
Matrix: Solid

Prep Batch #: J
Lab Batch ID: 83405
Units: mg/kg

Project ID: N/A
Analyst: 1029
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Cyanide Method Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Cyanide, Total	<1.250	5.000	4.740	95	5.000	4.740	95	0	80-120	20

Relative Percent Difference RPD = $200 * (D-F) / (D+E)$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

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Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83257

Date Prepared: 06/22/2010

Date Analyzed: 06/23/2010

Sample: 33325-1-BKS

Method: SW3550 / SW8081B

Project ID: N/A

Analyst: 1029

Matrix: Solid

Units: ug/kg

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<9.862	19.82	30.72	155	19.78	17.80	90	53	80-126	25	HF
gamma-BHC (Lindane)	<9.862	19.82	30.81	155	19.78	18.00	91	52	81-124	25	HF
beta-BHC	<9.862	19.82	29.37	148	19.78	17.55	89	50	77-121	25	HF
delta-BHC	<9.862	19.82	33.34	168	19.78	19.47	98	53	75-126	25	HF
Heptachlor	<9.862	19.82	28.85	146	19.78	17.14	87	51	76-120	25	HF
Aldrin	<9.862	19.82	30.41	153	19.78	17.85	90	52	81-122	25	HF
Heptachlor epoxide	<9.862	19.82	30.01	151	19.78	17.97	91	50	81-123	25	HF
gamma-Chlordane	<9.862	19.82	32.21	163	19.78	19.02	96	52	89-135	25	HF
alpha-Chlordane	<9.862	19.82	32.65	165	19.78	19.42	98	51	82-121	25	HF
4,4-DDE	<9.862	19.82	33.71	170	19.78	19.66	99	53	78-138	25	HF
Endosulfan I	<9.862	19.82	31.36	158	19.78	18.78	95	50	82-123	25	HF
Dieldrin	<9.862	19.82	33.91	171	19.78	20.07	101	51	81-126	25	HF
Endrin	<9.862	19.82	32.34	163	19.78	19.52	99	49	70-131	25	HF
4,4-DDD	<9.862	19.82	33.37	168	19.78	19.77	100	51	68-143	25	HF
Endosulfan II	<9.862	19.82	32.51	164	19.78	19.55	99	49	80-133	25	HF
4,4-DDT	<9.862	19.82	34.94	176	19.78	20.45	103	52	68-129	25	HF
Endrin aldehyde	<9.862	19.82	37.22	188	19.78	22.69	115	48	77-127	25	HF
Methoxychlor	<9.862	19.82	28.68	145	19.78	17.75	90	47	67-121	25	HF
Endosulfan sulfate	<9.862	19.82	32.81	166	19.78	19.70	100	50	79-126	25	HF
Endrin ketone	<9.862	19.82	34.40	174	19.78	20.93	106	49	82-137	25	HF

Relative Percent Difference RPD = $200 * [(D-G)/(D+G)]$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

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= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83324

Units: mg/kg

Date Prepared: 06/24/2010

Date Analyzed: 06/25/2010

Sample: 33354-1-BKS

Method: SW3550 / SW8082

Project ID: N/A

Analyst: 1029

Matrix: Solid

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Analytes	PCBS	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		PCB-1016		<0.0493	0.4955	0.4057	82	0.4946	0.4142	84	2	59-123
PCB-1260		<0.0493	0.4955	0.4714	95	0.4946	0.4815	97	2	54-152	25	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83357

Units: ug/kg

Sample: 33379-1-BKS

Method: SW3550 / SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Solid

Date Prepared: 06/28/2010

Date Analyzed: 06/28/2010

Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<83.28	1333	1456	109	1329.0	1463	110	1	63-120	30	
Acenaphthylene	<83.28	1333	1443	108	1329.0	1479	111	3	59-125	30	
Acetophenone	<83.28	1333	1503	113	1329.0	1584	119	5	57-122	30	
Anthracene	<83.28	1333	1395	105	1329.0	1470	111	6	63-121	30	
Benzo(a)anthracene	<83.28	1333	1481	111	1329.0	1539	116	4	61-130	30	
Benzo(a)pyrene	<83.28	1333	1579	118	1329.0	1639	123	4	58-141	30	
Benzo(b)fluoranthene	<83.28	1333	1509	113	1329.0	1598	120	6	59-140	30	
Benzo(g,h,i)perylene	<83.28	1333	1736	130	1329.0	1610	121	7	32-158	30	
Benzo(k)fluoranthene	<83.28	1333	1442	108	1329.0	1595	120	11	55-137	30	
Benzyl butyl phthalate	<83.28	1333	1493	112	1329.0	1620	122	9	57-132	30	
bis(2-chloroethoxy) methane	<83.28	1333	1429	107	1329.0	1488	112	5	61-123	30	
bis(2-chloroethyl) ether	<83.28	1333	1491	112	1329.0	1570	118	5	55-127	30	
bis(2-chloroisopropyl) ether	<83.28	1333	1347	101	1329.0	1424	107	6	42-128	30	
bis(2-ethylhexyl) phthalate	<83.28	1333	1480	111	1329.0	1591	120	8	52-142	30	
4-Bromophenylphenyl ether	<83.28	1333	1571	118	1329.0	1705	128	8	66-138	30	
Di-n-butyl phthalate	<166.6	1333	1306	98	1329.0	1328	100	2	54-126	30	
4-Chloro-3-methylphenol	<83.28	1333	1502	113	1329.0	1575	119	5	63-125	30	
4-Chloroaniline	<166.6	1333	1460	110	1329.0	1538	116	5	64-118	30	
2-Chloronaphthalene	<83.28	1333	1381	104	1329.0	1432	108	4	62-117	30	
2-Chlorophenol	<83.28	1333	1514	114	1329.0	1587	119	4	57-128	30	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83357

Units: ug/kg

Sample: 33379-1-BKS

Project ID: N/A
Analyst: 1040
Matrix: Solid

Date Prepared: 06/28/2010

Date Analyzed: 06/28/2010

Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
4-Chlorophenyl phenyl ether	<83.28	1333	1388	104	1329.0	1415	106	2	65-129	30	
Chrysene	<83.28	1333	1427	107	1329.0	1515	114	6	62-127	30	
Dibenz(a,h)anthracene	<83.28	1333	1774	133	1329.0	1691	127	5	43-148	30	
Dibenzofuran	<83.28	1333	1440	108	1329.0	1479	111	3	63-120	30	
3,3-Dichlorobenzidine	<83.28	1333	1178	88	1329.0	1263	95	8	32-138	30	
2,4-Dichlorophenol	<83.28	1333	1515	114	1329.0	1573	118	3	65-127	30	
Diethyl phthalate	<83.28	1333	1439	108	1329.0	1423	107	1	58-124	30	
Dimethyl phthalate	<83.28	1333	1469	110	1329.0	1488	112	2	55-125	30	
2,4-Dimethylphenol	<83.28	1333	1465	110	1329.0	1534	115	4	65-124	30	
4,6-Dinitro-2-methyl phenol	<83.28	1333	1556	117	1329.0	1630	123	5	26-167	30	
2,4-Dinitrophenol	<166.6	1333	1501	113	1329.0	1512	114	1	18-177	30	
2,4-Dinitrotoluene	<83.28	1333	1430	107	1329.0	1413	106	1	60-134	30	
2,6-Dinitrotoluene	<83.28	1333	1495	112	1329.0	1518	114	2	63-136	30	
Fluoranthene	<83.28	1333	1250	94	1329.0	1226	92	2	54-127	30	
Fluorene	<83.28	1333	1390	104	1329.0	1418	107	3	64-119	30	
Hexachlorobenzene	<83.28	1333	1464	110	1329.0	1581	119	8	58-124	30	
Hexachlorobutadiene	<83.28	1333	1426	107	1329.0	1493	112	5	64-128	30	
Hexachlorocyclopentadiene	<83.28	1333	1381	104	1329.0	1442	109	5	26-152	30	
Hexachloroethane	<83.28	1333	1431	107	1329.0	1495	112	5	55-125	30	
Indeno(1,2,3-c,d)pyrene	<83.28	1333	1867	140	1329.0	1771	133	5	38-150	30	

Relative Percent Difference RPD = $200 * (D-G) / (D+G)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

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= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Project ID: N/A
Analyst: 1040
Matrix: Solid

York Order #: 10062115
Prep Batch #: 1
Lab Batch ID: 83357
Units: ug/kg
Sample: 33379-1-BKS
Date Prepared: 06/28/2010
Date Analyzed: 06/28/2010

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Isophorone	<83.28	1333	1466	110	1329.0	1515	114	4	56-120	30	
2-Methylnaphthalene	<83.28	1333	1404	105	1329.0	1461	110	5	63-120	30	
2-Methylphenol	<83.28	1333	1503	113	1329.0	1594	120	6	57-121	30	
3&4-Methylphenol	<83.28	1333	1454	109	1329.0	1550	117	7	49-123	30	
4-Nitroaniline	<83.28	1333	1191	89	1329.0	1123	84	6	53-128	30	
3-Nitroaniline	<83.28	1333	1432	107	1329.0	1415	106	1	53-132	30	
2-Nitroaniline	<166.6	1333	1553	117	1329.0	1578	119	2	54-131	30	
Nitrobenzene	<83.28	1333	1438	108	1329.0	1523	115	6	53-119	30	
2-Nitrophenol	<83.28	1333	1620	122	1329.0	1719	129	6	65-137	30	
4-Nitrophenol	<83.28	1333	1275	96	1329.0	1194	90	6	50-123	30	
N-Nitrosodimethylamine	<83.28	1333	1475	111	1329.0	1541	116	4	62-123	30	
N-Nitrosodi-n-propylamine	<83.28	1333	1419	106	1329.0	1495	112	6	46-121	30	
N-Nitrosodiphenylamine	<83.28	1333	1490	112	1329.0	1620	122	9	56-129	30	
Di-n-octyl phthalate	<83.28	1333	1351	101	1329.0	1548	116	14	38-144	30	
1,2,4,5-Tetrachlorobenzene	<83.28	1333	1459	109	1329.0	1525	115	5	64-127	30	
Pentachlorophenol	<166.6	1333	1419	106	1329.0	1445	109	3	46-134	30	
Phenanthrene	<83.28	1333	1388	104	1329.0	1444	109	5	61-119	30	
Phenol	<83.28	1333	1352	101	1329.0	1438	108	7	47-108	30	
Pyrene	<83.28	1333	1466	110	1329.0	1617	122	10	54-141	30	
2,3,4,6-Tetrachlorophenol	<83.28	1333	1541	116	1329.0	1536	116	0	56-130	30	

Relative Percent Difference RPD = $200 * [(D-G)/(D+G)]$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

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= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83357

Units: ug/kg

Sample: 33379-1-BKS

Date Prepared: 06/28/2010

Date Analyzed: 06/28/2010

Project ID: N/A

Analyst: 1040

Matrix: Solid

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4,6-Trichlorophenol	<83.28	1333	1537	115	1329.0	1603	121	5	67-127	30	
2,4,5-Trichlorophenol	<83.28	1333	1565	117	1329.0	1603	121	3	69-132	30	

Relative Percent Difference RPD = $200 * [(D-G)/(D+G)]$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Project ID: N/A
 Analyst: 1035
 Matrix: Solid

Sample: 33355-1-BKS
 Method: SW5035 / SW8260B

Work Order #: 10062115
 Date Prepared: 06/22/2010
 Date Analyzed: 06/22/2010

Prep Batch #: 1
 Lab Batch ID: 83282
 Units: ug/kg

Volatile Organic Compounds	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Analytes												
Dichlorodifluoromethane	<2.500	60.00	87.04	145	60.0	64.31	107	30	55-125	30	H	
Chloromethane	<2.500	60.00	74.68	124	60.0	59.08	98	23	62-125	30		
Vinyl Chloride	<2.500	60.00	79.85	133	60.0	60.01	100	28	65-130	30	H	
Bromomethane	<2.500	60.00	76.62	128	60.0	62.00	103	22	59-131	30		
Chloroethane	<2.500	60.00	78.41	131	60.0	60.72	101	26	57-135	30		
Acetone	<10.00	60.00	34.11	57	60.0	26.26	44	26	7-180	30		
Trichlorofluoromethane	<2.500	60.00	80.56	134	60.0	61.11	102	27	55-133	30	H	
1,1-Dichloroethene	<2.500	60.00	73.10	122	60.0	56.64	94	26	60-122	30		
Methylene chloride	<2.500	60.00	64.34	107	60.0	53.34	89	18	63-125	30		
trans-1,2-Dichloroethene	<2.500	60.00	78.90	132	60.0	62.49	104	24	62-129	30	H	
1,1-Dichloroethane	<2.500	60.00	71.55	119	60.0	56.73	95	22	55-135	30		
Vinyl acetate	<2.500	60.00	77.32	129	60.0	63.24	105	21	57-136	30		
2-Butanone (MEK)	<10.00	60.00	33.47	56	60.0	27.21	45	22	36-201	30		
cis-1,2-Dichloroethene	<2.500	60.00	71.58	119	60.0	57.84	96	21	60-127	30		
Bromochloromethane	<2.500	60.00	67.80	113	60.0	57.74	96	16	66-127	30		
Chloroform	<2.500	60.00	67.15	112	60.0	55.23	92	20	64-113	30		
2,2-Dichloropropane	<2.500	60.00	76.10	127	60.0	56.63	94	30	53-129	30		
1,1,1-Trichloroethane	<2.500	60.00	76.84	128	60.0	58.63	98	27	57-127	30	H	
1,2-Dichloroethane	<2.500	60.00	60.76	101	60.0	51.78	86	16	62-124	30		
1,1-Dichloropropene	<2.500	60.00	75.22	125	60.0	56.57	94	28	61-122	30	H	

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Relative Percent Difference RPD = 200*(D-G)/(D+G)
 Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83282

Units: ug/kg

Project ID: N/A

Analyst: 1035

Matrix: Solid

Sample: 33355-i-BKS

Date Prepared: 06/22/2010

Date Analyzed: 06/22/2010

Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon tetrachloride	<2.500	60.00	79.21	132	60.0	58.34	97	31	55-131	30	HF
Benzene	<2.500	60.00	69.97	117	60.0	55.88	93	23	64-114	30	H
Dibromomethane	<2.500	60.00	63.58	106	60.0	53.40	89	17	64-132	30	
1,2-Dichloropropane	<2.500	60.00	64.66	108	60.0	53.41	89	19	61-117	30	
Carbon Disulfide	<5.000	60.00	65.95	110	60.0	51.11	85	26	37-161	30	
Trichloroethene	<2.500	60.00	74.09	123	60.0	57.19	95	26	62-121	30	H
Acrylonitrile	<10.00	60.00	68.00	113	60.0	51.78	86	27	59-168	30	
Bromodichloromethane	<2.500	60.00	67.07	112	60.0	55.17	92	20	62-126	30	
cis-1,3-Dichloropropene	<2.500	60.00	66.84	111	60.0	55.29	92	19	59-119	30	
4-Methyl-2-Pentanone (MIBK)	<10.00	60.00	48.95	82	60.0	37.72	63	26	59-148	30	
trans-1,3-Dichloropropene	<2.500	60.00	66.31	111	60.0	54.75	91	20	51-126	30	
1,1,2-Trichloroethane	<2.500	60.00	64.40	107	60.0	53.39	89	18	60-134	30	
Toluene	<2.500	60.00	72.12	120	60.0	56.77	95	23	64-117	30	H
1,3-Dichloropropane	<2.500	60.00	59.35	99	60.0	48.73	81	20	61-129	30	
2-Hexanone (MBK)	<10.00	60.00	37.38	62	60.0	29.07	48	25	9-176	30	
1,2-Dibromoethane	<2.500	60.00	63.08	105	60.0	52.04	87	19	65-135	30	
Dibromochloromethane	<2.500	60.00	64.79	108	60.0	53.83	90	18	67-126	30	
Acetone	<10.00	60.00	63.63	106	60.0	60.06	100	6	52-168	30	
1,1,1,2-Tetrachloroethane	<2.500	60.00	68.92	115	60.0	55.84	93	21	64-121	30	
Bromoform	<2.500	60.00	66.54	111	60.0	54.54	91	20	62-120	30	

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Relative Percent Difference RPD = $200 * |(D-G)/(D+G)|$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS,BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 1

Lab Batch ID: 83282

Units: ug/kg

Project ID: N/A
Analyst: 1035
Matrix: Solid

Sample: 33355-1-BKS

Date Prepared: 06/22/2010

Date Analyzed: 06/22/2010

Volatiles Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
trans-1,4-dichloro-2-butene	<2.500	60.00	67.66	113	60.0	50.98	85	28	43-133	30	
Tetrachloroethene	<2.500	60.00	80.07	133	60.0	59.51	99	29	58-129	30	H
Chlorobenzene	<2.500	60.00	67.18	112	60.0	54.78	91	21	64-116	30	
Ethylbenzene	<2.500	60.00	70.38	117	60.0	54.89	91	25	61-118	30	
m&p-Xylene	<5.000	120	144.1	120	120.0	112.2	94	24	63-116	30	H
Styrene	<2.500	60.00	68.64	114	60.0	56.29	94	19	60-112	30	H
1,1,2,2-Tetrachloroethane	<2.500	60.00	56.45	94	60.0	46.71	78	19	58-144	30	
o-Xylene	<2.500	60.00	70.81	118	60.0	57.09	95	22	65-117	30	H
1,2,3-Trichloropropane	<2.500	60.00	62.68	104	60.0	49.49	82	24	59-139	30	
1,3-Dichlorobenzene	<2.500	60.00	67.53	113	60.0	55.03	92	20	58-123	30	
1,4-Dichlorobenzene	<2.500	60.00	65.41	109	60.0	54.11	90	19	58-121	30	
1,2-Dichlorobenzene	<2.500	60.00	64.73	108	60.0	54.40	91	17	59-124	30	
1,2-Dibromo-3-chloropropane	<20.00	60.00	61.48	102	60.0	48.55	81	23	57-144	30	
1,2,4-Trichlorobenzene	<2.500	60.00	70.24	117	60.0	58.53	98	18	46-122	30	
Iodomethane	<10.00	60.00	65.25	109	60.0	50.68	84	26	46-137	30	
Naphthalene	<2.500	60.00	71.01	118	60.0	57.61	96	21	54-164	30	
1,2,3-Trichlorobenzene	<2.500	60.00	70.24	117	60.0	57.27	95	21	48-126	30	

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Relative Percent Difference RPD = $200 * [(D-G)/(D+G)]$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A

Prep Batch #: 33335

Date Prepared: 06/23/2010

Sample ID: 33335-1-BKS

Matrix: Solid

Lab Batch ID 83293

Date Analyzed: 06/24/2010

Analyst: 1033

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1 250	20.00	19.53	98	75-125	
Arsenic	<0.2500	20.00	19.92	100	75-125	
Barium	<1 250	20.00	19.73	99	75-125	
Beryllium	<1 250	20.00	18.03	90	75-125	
Cadmium	<1 250	20.00	19.03	95	75-125	
Chromium	<1 250	20.00	19.61	98	75-125	
Cobalt	<1.250	20.00	19.70	99	75-125	
Copper	<1 250	20.00	19.42	97	75-125	
Lead	<1 250	20.00	19.83	99	75-125	
Mercury	0 1000	0 5000	0 5650	93	75-125	
Nickel	<1 250	20.00	19.85	99	75-125	
Selenium	<1 250	20.00	19.23	96	75-125	
Silver	<1 250	20.00	20.18	101	75-125	
Thallium	<1 000	20.00	19.25	96	75-125	
Tin	<2.500	20.00	19.41	97	75-125	
Vanadium	<1 250	20.00	19.27	96	75-125	
Zinc	<5 000	20.00	19.45	97	75-125	

Blank Spike Recovery [D] = $100 * (([C] - [A]) / [B])$

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H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits



Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A

Prep Batch #: 33335

Date Prepared: 06/23/2010

Sample ID: 33335-1-BKS

Matrix: Solid

Lab Batch ID 83322

Date Analyzed: 06/25/2010

Analyst: 1033

Reporting Units: mg/kg

BLANK/BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1.250	20.00	21.18	106	75-125	
Arsenic	<0.2500	20.00	20.59	103	75-125	
Barium	<1.250	20.00	20.48	102	75-125	
Beryllium	<1.250	20.00	19.92	100	75-125	
Cadmium	<1.250	20.00	20.41	102	75-125	
Chromium	<1.250	20.00	21.04	105	75-125	
Cobalt	<1.250	20.00	20.34	102	75-125	
Copper	<1.250	20.00	20.44	102	75-125	
Lead	<1.250	20.00	20.58	103	75-125	
Mercury	<0.0500	0.5000	0.5350	107	75-125	
Nickel	<1.250	20.00	21.33	107	75-125	
Selenium	<1.250	20.00	20.21	101	75-125	
Silver	<1.250	20.00	20.99	105	75-125	
Thallium	<1.000	20.00	19.89	99	75-125	
Tin	<2.500	20.00	20.01	100	75-125	
Vanadium	<1.250	20.00	20.14	101	75-125	
Zinc	<5.000	20.00	20.23	101	75-125	

Blank Spike Recovery [D] = 100*(([C]-[A])/[B])

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H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Client Sample Id: S-1 S
 Date Prepared: 06/22/2010
 Lab Batch ID: 83289
 Reporting Units: ug/kg
 Project ID: N/A
 Analyst: 1029
 Matrix: Soil
 Sample ID: 10061803-001 S
 Method: SW8151A_PREP/SW8151A

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Herbicides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<107.8	1074	900	84	1082	915.9	85	1	57-117	30	
2,4,5-TP (Silvex)	<10.78	107.4	97.42	91	108.2	100.9	93	2	59-126	30	
2,4,5-T	<10.78	107.4	128.9	120	108.2	126.2	117	3	66-144	30	
Dinoseb	<53.92	537	447.6	83	540.8	462.6	86	4	63-106	30	

Client Sample Id: Gude-MW3A-SO-0 to 2 S

Prep Batch #: 83405
 Lab Batch ID: 83405
 Reporting Units: mg/kg
 Date Prepared: 07/01/2010
 Date Analyzed: 07/01/2010
 Analyst: 1022
 Matrix: Soil
 Sample ID: 10062115-001 S
 Method: /SW9014

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Cyanide Method Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Cyanide, Total	<1.524	6.098	5.988	98	6.098	5.988	98	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of OC Criteria and RPD exceeded the laboratory control limits.

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 Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Project ID: N/A
Analyst: 1029
Matrix: Soil

Client Sample Id: Gude-SS5-SO-0 to 1 S
Sample ID: 10061114-005 S
Method: SW3550/SW8081B

Date Prepared: 06/22/2010
Date Analyzed: 06/23/2010

Prep Batch #: 33325
Lab Batch ID: 83257
Reporting Units: ug/kg

Organochlorine Pesticides Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											Control Limits %RPD	Control Limits %R	RPD %	Spiked Dup. %R [G]	Flag
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Sample %R [G]	Duplicate Spiked Sample Result [H]	Spiked Sample %R [I]	Spike Added [J]	Duplicate Spiked Sample Result [K]					
alpha-BHC	<11.10	22.24	19.67	88	22.30	20.00	90	20.00	22.30	20.00	90	2	70-130	30		
gamma-BHC (Lindane)	<11.10	22.24	19.61	88	22.30	20.42	92	20.42	22.30	20.42	92	4	72-128	30		
beta-BHC	<11.10	22.24	19.44	87	22.30	20.50	92	20.50	22.30	20.50	92	6	74-121	30		
delta-BHC	<11.10	22.24	18.82	85	22.30	19.88	89	19.88	22.30	19.88	89	5	72-127	30		
Heptachlor	<11.10	22.24	17.89	80	22.30	18.31	82	18.31	22.30	18.31	82	2	66-127	30		
Aldrin	<11.10	22.24	19.38	87	22.30	19.93	89	19.93	22.30	19.93	89	2	71-130	30		
Heptachlor epoxide	<11.10	22.24	18.57	83	22.30	18.98	85	18.98	22.30	18.98	85	2	73-128	30		
gamma-Chlordane	<11.10	22.24	21.26	96	22.30	22.08	99	22.08	22.30	22.08	99	3	73-153	30		
alpha-Chlordane	<11.10	22.24	21.36	96	22.30	22.24	100	22.24	22.30	22.24	100	4	62-144	30		
4,4-DDE	<11.10	22.24	28.16	127	22.30	29.84	134	29.84	22.30	29.84	134	5	78-143	30		
Endosulfan I	<11.10	22.24	20.73	93	22.30	21.59	97	21.59	22.30	21.59	97	4	73-129	30		
Dieldrin	<11.10	22.24	22.65	102	22.30	23.76	107	23.76	22.30	23.76	107	5	72-136	30		
Endrin	<11.10	22.24	22.82	103	22.30	24.10	108	24.10	22.30	24.10	108	5	82-131	30		
4,4-DDD	<11.10	22.24	22.73	102	22.30	24.83	111	24.83	22.30	24.83	111	8	70-143	30		
Endosulfan II	<11.10	22.24	21.59	97	22.30	22.68	102	22.68	22.30	22.68	102	5	75-136	30		
4,4-DDT	<11.10	22.24	24.57	110	22.30	23.95	107	23.95	22.30	23.95	107	3	78-125	30		
Endrin aldehyde	<11.10	22.24	24.67	111	22.30	25.54	115	25.54	22.30	25.54	115	4	78-130	30		
Methoxychlor	<11.10	22.24	20.67	93	22.30	21.15	95	21.15	22.30	21.15	95	2	71-122	30		
Endosulfan sulfate	<11.10	22.24	22.95	103	22.30	24.28	109	24.28	22.30	24.28	109	6	77-129	30		
Endrin ketone	<11.10	22.24	23.04	104	22.30	24.11	108	24.11	22.30	24.11	108	4	75-145	30		

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 33379

Date Prepared: 06/28/2010

Date Analyzed: 06/28/2010

Client Sample Id: B-1 4-8' S

Sample ID: 10062305-001 S

Method: SW3550 / SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

Reporting Units: ug/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Semivolatile Organic Compounds	Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene		<85.77	1370	1062	78	1371	1249	91	15	52-128	30	
Acenaphthylene		<85.77	1370	1072	78	1371	1266	92	16	59-119	30	
Acetophenone		<85.77	1370	1031	75	1371	1267	92	20	53-115	30	
Anthracene		<85.77	1370	1232	90	1371	1251	91	1	51-137	30	
Benzo(a)anthracene		<85.77	1370	1288	94	1371	1297	95	1	45-163	30	
Benzo(a)pyrene		<85.77	1370	1378	101	1371	1396	102	1	52-164	30	
Benzo(b)fluoranthene		<85.77	1370	1328	97	1371	1449	106	9	58-154	30	
Benzo(g,h,i)perylene		<85.77	1370	1551	113	1371	1334	97	15	37-144	30	
Benzo(k)fluoranthene		<85.77	1370	1294	94	1371	1335	97	3	49-160	30	
Benzyl butyl phthalate		<85.77	1370	1370	100	1371	1426	104	4	40-179	30	
bis(2-chloroethoxy) methane		<85.77	1370	980.6	72	1371	1247	91	23	53-120	30	
bis(2-chloroethyl) ether		<85.77	1370	975.1	71	1371	1240	90	24	47-116	30	
bis(2-chloroisopropyl) ether		<85.77	1370	926.1	68	1371	1163	85	22	45-112	30	
bis(2-ethylhexyl) phthalate		<85.77	1370	1350	99	1371	1370	100	1	43-172	30	
4-Bromophenylphenyl ether		<85.77	1370	1348	98	1371	1313	96	2	44-159	30	
Di-n-butyl phthalate		<171.5	1370	1147	84	1371	1202	88	5	54-131	30	
4-Chloro-3-methylphenol		<85.77	1370	1188	87	1371	1361	99	13	57-130	30	
4-Chloroaniline		<171.5	1370	1082	79	1371	1314	96	19	50-122	30	
2-Chloronaphthalene		<85.77	1370	988.1	72	1371	1200	88	20	50-124	30	
2-Chlorophenol		<85.77	1370	1007	74	1371	1286	94	24	54-119	30	
4-Chlorophenyl phenyl ether		<85.77	1370	1128	82	1371	1239	90	9	57-133	30	
Chrysene		<85.77	1370	1281	94	1371	1269	93	1	42-165	30	
Dibenz(a,h)anthracene		<85.77	1370	1589	116	1371	1418	103	12	37-140	30	
Dibenzofuran		<85.77	1370	1101	80	1371	1260	92	14	44-138	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of OC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 83357

Date Prepared: 06/28/2010
Date Analyzed: 06/28/2010

Client Sample Id: 10062305-001 S
Sample ID: SW3550/SW8270C
Method: SW3550/SW8270C

Project ID: N/A
Analyst: 1040
Matrix: Soil

Reporting Units: ug/kg

Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
3,3-Dichlorobenzidine	<85.77	1370	1178	86	1371	992.9	72	18	11-140	30	
2,4-Dichlorophenol	<85.77	1370	1057	77	1371	1325	97	23	56-131	30	
Diethyl phthalate	<85.77	1370	1219	89	1371	1279	93	4	51-126	30	
Dimethyl phthalate	<85.77	1370	1202	88	1371	1290	94	7	56-120	30	
2,4-Dimethylphenol	<85.77	1370	987.8	72	1371	1244	91	23	49-124	30	
4,6-Dinitro-2-methyl phenol	<85.77	1370	1408	103	1371	1493	109	6	1-187	30	
2,4-Dinitrophenol	<171.5	1370	1273	93	1371	1562	114	20	4-200	30	
2,4-Dinitrotoluene	<85.77	1370	1222	89	1371	1347	98	10	57-138	30	
2,6-Dinitrotoluene	<85.77	1370	1221	89	1371	1342	98	10	61-136	30	
Fluoranthene	<85.77	1370	1037	76	1371	1164	85	11	40-155	30	
Fluorene	<85.77	1370	1128	82	1371	1251	91	10	55-128	30	
Hexachlorobenzene	<85.77	1370	1297	95	1371	1272	93	2	52-129	30	
Hexachlorobutadiene	<85.77	1370	956.9	70	1371	1233	90	25	50-128	30	
Hexachlorocyclopentadiene	<85.77	1370	885.4	65	1371	1252	91	33	13-144	30	F
Hexachloroethane	<85.77	1370	954.2	70	1371	1191	87	22	42-117	30	
Indeno(1,2,3-c,d)pyrene	<85.77	1370	1639	120	1371	1451	106	12	48-135	30	
Isophorone	<85.77	1370	1010	74	1371	1253	91	21	51-114	30	
2-Methylnaphthalene	<85.77	1370	1004	73	1371	1216	89	20	49-130	30	
2-Methylphenol	<85.77	1370	1044	76	1371	1293	94	21	54-119	30	
3&4-Methylphenol	<85.77	1370	1026	75	1371	1259	92	20	50-115	30	
4-Nitroaniline	<85.77	1370	1001	73	1371	1224	89	20	50-133	30	
3-Nitroaniline	<85.77	1370	1214	89	1371	1382	101	13	49-133	30	
2-Nitroaniline	<171.5	1370	1244	91	1371	1427	104	13	53-133	30	
Nitrobenzene	<85.77	1370	1001	73	1371	1251	91	22	48-113	30	

Matrix Spike Percent Recovery [DI] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [GI] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 83357

Date Prepared: 06/28/2010
Date Analyzed: 06/28/2010

Client Sample Id: 10062305-001 S
Sample ID: 10062305-001 S
Method: SW3550 /SW8270C

Project ID: N/A
Analyst: 1040
Matrix: Soil

Reporting Units: ug/kg

Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2-Nitrophenol	<85.77	1370	1119	82	1371	1451	106	26	56-136	30	
4-Nitrophenol	<85.77	1370	1042	76	1371	1233	90	17	47-135	30	
N-Nitrosodimethylamine	<85.77	1370	942.2	69	1371	1211	88	24	45-122	30	
N-Nitrosodi-n-propylamine	<85.77	1370	993.3	73	1371	1192	87	18	44-113	30	
N-Nitrosodiphenylamine	<85.77	1370	1315	96	1371	1254	91	5	57-124	30	
Di-n-octyl phthalate	<85.77	1370	1262	92	1371	1475	108	16	25-185	30	
1,2,4,5-Tetrachlorobenzene	<85.77	1370	1018	74	1371	1265	92	22	51-131	30	
Pentachloroethene	<171.5	1370	1238	90	1371	1295	94	4	34-154	30	
Phenanthrene	<85.77	1370	1212	88	1371	1239	90	2	46-141	30	
Phenol	<85.77	1370	968.3	71	1371	1156	84	17	47-103	30	
Pyrene	<85.77	1370	1389	101	1371	1416	103	2	24-181	30	
2,3,4,6-Tetrachlorophenol	<85.77	1370	1294	94	1371	1428	104	10	49-141	30	
2,4,6-Trichlorophenol	<85.77	1370	1120	82	1371	1350	98	18	59-133	30	
2,4,5-Trichlorophenol	<85.77	1370	1179	86	1371	1382	101	16	61-138	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062115

Prep Batch #: 33335

Lab Batch ID: 83293

Reporting Units: mg/kg

Date Prepared: 06/23/2010

Date Analyzed: 06/24/2010

Client Sample Id: Gude-SS1-SO-0 to I S

Sample ID: 10061114-001 S

Method: SW3050B /SW6020

Project ID: N/A

Analyst: 1033

Matrix: Soil

Total Metals Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											Flag
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD		
Antimony	<1.682	24.57	16.73	68	23.28	13.61	58	16	75-125	30	X	
Arsenic	3.547	24.57	25.40	89	23.28	23.23	85	5	75-125	30		
Barium	81.90	24.57	111.1	119	23.28	108.6	115	3	75-125	30		
Beryllium	<1.682	24.57	22.01	90	23.28	20.06	86	5	75-125	30		
Cadmium	<1.682	24.57	23.54	96	23.28	21.06	90	6	75-125	30		
Chromium	33.68	24.57	58.19	100	23.28	55.81	95	5	75-125	30		
Cobalt	20.69	24.57	44.87	98	23.28	42.31	93	5	75-125	30		
Copper	28.22	24.57	52.10	97	23.28	48.94	89	9	75-125	30		
Lead	20.32	24.57	45.62	103	23.28	42.65	96	7	75-125	30		
Mercury	0.2625	0.6143	0.9275	108	0.5820	0.7158	78	32	75-125	30	F	
Nickel	32.24	24.57	56.42	98	23.28	54.53	96	2	75-125	30		
Selenium	<1.682	24.57	22.62	92	23.28	20.72	89	3	75-125	30		
Silver	<1.682	24.57	24.51	100	23.28	21.77	94	6	75-125	30		
Thallium	<1.346	24.57	24.22	99	23.28	21.95	94	5	75-125	30		
Tin	<3.365	24.57	24.88	101	23.28	22.29	96	5	75-125	30		
Vanadium	49.03	24.57	75.18	106	23.28	70.54	92	14	75-125	30		
Zinc	59.56	24.57	82.25	92	23.28	84.21	106	14	75-125	30		

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

ANALYTICAL REPORT

PROJECT NO. 10062115

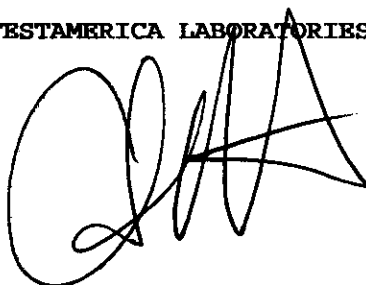
Phase Sep Science East Station

Lot #: C0F230532

John Slowikowski

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.



Christina M. Kovitch
Project Manager

July 7, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW	X
US Dept of Agriculture	(#P330-10-00139)	HW	X
Arkansas	(#88-0690)	Foreign Soil Import Permit	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008)	WW	X
		HW	X
Illinois – NELAC	(#002319)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203010)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Ptsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0F230532

Sample Receiving:

TestAmerica Pittsburgh received samples on June 23, 2010. The cooler was received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

OPP's:

All compounds <20% RSD will use an average response factor curve if no visible improvement is accomplished using a curve. A curve will be used for a compound where it is determined to be the "best-fit" evaluation.

General Chemistry:

There were no problems associated with the analysis.



Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Catonsville, MD 21228

W.O. No.: 10062115
P.O. No.:
Project Name: Gude Landfill
Project Number: N/A

Contact: Ken Ives
Phone: 410-869-0085

For Questions or issues please contact: John Slowikowski

Report Due On : 07/06/10 05:00

Table with columns: Lab Sample ID, Field Sample ID, Date Sampled, Time Sampled, Matrix, Analyses Required, Method, Type of Container, Preservative. Contains 6 rows of sample data.

Data Deliverables Required: Results, copy of COC and QC

Perform Q.C. on Sample :

Send Report Attn : BETSY OER

Airbill No.: Carrier: Test America
Condition Upon Receipt: Revised - 6/22/10
Comments:
Samples Relinquished By: LM Date: 6/22/10 Time: 11:00
Samples Relinquished By: RMD Date: 6-22-2010 Time: 1:30
Samples Relinquished By: Date: Time:

Samples Received By: [Signature]
Samples Received By: Emily Dunc 6/28/10 10:20
Samples Received By: Date: Time:

Sub-Contractor Method Matrix Analyte Name

METHODS SUMMARY

C0F230532

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Organophosphorous Compounds by GC	SW846 8141A	SW846 3541
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C0F230532

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L3APP	001	10062115-001	06/18/10	10:50
L3AP6	002	10062115-002	06/18/10	13:30
L3AP8	003	10062115-003	06/18/10	12:00

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10062115-001

GC Semivolatiles

Lot-Sample #...: C0F230532-001 Work Order #...: L3APP1AC Matrix.....: SOLID
Date Sampled...: 06/18/10 Date Received..: 06/23/10 MS Run #.....: 0175012
Prep Date.....: 06/24/10 Analysis Date..: 06/24/10
Prep Batch #...: 0175022 Analysis Time..: 19:35
Dilution Factor: 0.99
% Moisture.....: 25 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	44	ug/kg
Disulfoton	ND	44	ug/kg
Famphur	ND	44	ug/kg
Methyl parathion	ND	44	ug/kg
Parathion	ND	44	ug/kg
Thionazin	ND	44	ug/kg
Phorate	ND	44	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	88	(47 - 130)	
Tributyl phosphate	90	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062115-002

GC Semivolatiles

Lot-Sample #...: C0F230532-002 Work Order #...: L3AP61AC Matrix.....: SOLID
Date Sampled...: 06/18/10 Date Received..: 06/23/10 MS Run #.....: 0175012
Prep Date.....: 06/24/10 Analysis Date..: 06/24/10
Prep Batch #...: 0175022 Analysis Time..: 20:55
Dilution Factor: 1
% Moisture.....: 22 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	42	ug/kg
Disulfoton	ND	42	ug/kg
Famphur	ND	42	ug/kg
Methyl parathion	ND	42	ug/kg
Parathion	ND	42	ug/kg
Thionazin	ND	42	ug/kg
Phorate	ND	42	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	84	(47 - 130)	
Tributyl phosphate	83	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062115-003

GC Semivolatiles

Lot-Sample #...: C0F230532-003 Work Order #...: L3AP81AC Matrix.....: SOLID
Date Sampled...: 06/18/10 Date Received..: 06/23/10 MS Run #.....: 0175012
Prep Date.....: 06/24/10 Analysis Date..: 06/24/10
Prep Batch #...: 0175022 Analysis Time..: 21:22
Dilution Factor: 0.99
% Moisture.....: 17 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	39	ug/kg
Disulfoton	ND	39	ug/kg
Famphur	ND	39	ug/kg
Methyl parathion	ND	39	ug/kg
Parathion	ND	39	ug/kg
Thionazin	ND	39	ug/kg
Phorate	ND	39	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	80	(47 - 130)	
Tributyl phosphate	82	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: C0F230532
MB Lot-Sample #: C0F240000-022
Analysis Date...: 06/24/10
Dilution Factor: 1

Work Order #...: L3A9N1AA
Prep Date.....: 06/24/10
Prep Batch #...: 0175022

Matrix.....: SOLID
Analysis Time...: 23:09

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Thionazin	ND	33	ug/kg	SW846 8141A
Dimethoate	ND	33	ug/kg	SW846 8141A
Disulfoton	ND	33	ug/kg	SW846 8141A
Famphur	ND	33	ug/kg	SW846 8141A
Methyl parathion	ND	33	ug/kg	SW846 8141A
Parathion	ND	33	ug/kg	SW846 8141A
Phorate	ND	33	ug/kg	SW846 8141A
	<u>PERCENT</u>	<u>RECOVERY</u>		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Triphenyl phosphate	87	(47 - 130)		
Tributyl phosphate	78	(55 - 125)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F230532 Work Order #...: L3A9N1AC Matrix.....: SOLID
 LCS Lot-Sample#: C0F240000-022
 Prep Date.....: 06/24/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0175022 Analysis Time...: 23:35
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Thionazin	120	(48 - 126)	SW846 8141A
Phorate	113	(41 - 143)	SW846 8141A
Disulfoton	113	(31 - 136)	SW846 8141A
Methyl parathion	122	(43 - 146)	SW846 8141A
Parathion	122	(52 - 133)	SW846 8141A
Famphur	127	(54 - 137)	SW846 8141A
Dimethoate	103	(40 - 143)	SW846 8141A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Triphenyl phosphate	105	(47 - 130)
Tributyl phosphate	112	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F230532 Work Order #...: L3APP1AD-MS Matrix.....: SOLID
 MS Lot-Sample #: C0F230532-001 L3APP1AE-MSD
 Date Sampled...: 06/18/10 Date Received...: 06/23/10 MS Run #.....: 0175012
 Prep Date.....: 06/24/10 Analysis Date...: 06/24/10
 Prep Batch #...: 0175022 Analysis Time...: 20:01
 Dilution Factor: 0.99 % Moisture.....: 25

<u>PARAMETER</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	RPD	RPD <u>LIMITS</u>	<u>METHOD</u>
Thionazin	110	(48 - 126)			SW846 8141A
	99	(48 - 126)	11	(0-27)	SW846 8141A
Phorate	97	(41 - 143)			SW846 8141A
	88	(41 - 143)	9.5	(0-30)	SW846 8141A
Disulfoton	95	(31 - 136)			SW846 8141A
	86	(31 - 136)	10	(0-30)	SW846 8141A
Methyl parathion	119	(43 - 146)			SW846 8141A
	107	(43 - 146)	11	(0-30)	SW846 8141A
Parathion	114	(52 - 133)			SW846 8141A
	102	(52 - 133)	11	(0-30)	SW846 8141A
Famphur	111	(54 - 137)			SW846 8141A
	100	(54 - 137)	11	(0-30)	SW846 8141A
Dimethoate	113	(40 - 143)			SW846 8141A
	107	(40 - 143)	6.0	(0-30)	SW846 8141A

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Triphenyl phosphate	88	(47 - 130)
	94	(47 - 130)
Tributyl phosphate	96	(55 - 125)
	102	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters
 Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062115-001

General Chemistry

Lot-Sample #...: C0F230532-001 Work Order #...: L3APP Matrix.....: SOLID
Date Sampled...: 06/18/10 Date Received...: 06/23/10
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	74.7	1.0	%	SM20 2540G	06/30-07/01/10	0181024
		Dilution Factor: 1		Analysis Time..: 08:18	MS Run #.....: 0181010	
Total Sulfide	ND	40.2	mg/kg	SW846 9030B/9034	06/25/10	0176085
		Dilution Factor: 1		Analysis Time..: 13:05	MS Run #.....: 0176043	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062115-002

General Chemistry

Lot-Sample #...: C0F230532-002 Work Order #...: L3AP6 Matrix.....: SOLID
 Date Sampled...: 06/18/10 Date Received...: 06/23/10
 % Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	78.5	1.0	%	SM20 2540G	06/30-07/01/10	0181024
				Dilution Factor: 1	Analysis Time..: 08:18	MS Run #.....: 0181010
Total Sulfide	ND	38.2	mg/kg	SW846 9030B/9034	06/25/10	0176085
				Dilution Factor: 1	Analysis Time..: 13:05	MS Run #.....: 0176043

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062115-003

General Chemistry

Lot-Sample #...: C0F230532-003 Work Order #...: L3AP8 Matrix.....: SOLID
Date Sampled...: 06/18/10 Date Received...: 06/23/10
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	82.8	1.0	%	SM20 2540G	06/30-07/01/10	0181024
				Dilution Factor: 1	Analysis Time..: 08:18	MS Run #.....: 0181010
Total Sulfide	ND	36.2	mg/kg	SW846 9030B/9034	06/25/10	0176085
				Dilution Factor: 1	Analysis Time..: 13:05	MS Run #.....: 0176043

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0F230532

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Sulfide	ND	Work Order #: L3ECF1AA 30.0	mg/kg	MB Lot-Sample #: SW846 9030B/9034	C0F250000-085 06/25/10	0176085
		Dilution Factor: 1				
		Analysis Time..: 13:05				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F230532

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide	98	(85 - 115)	SW846 9030B/9034	06/25/10	0176085
		Dilution Factor: 1		Analysis Time.: 13:05	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F230532

Matrix.....: SOLID

Date Sampled...: 06/21/10

Date Received...: 06/24/10

PARAMETER	PERCENT	RECOVERY	RPD		METHOD	PREPARATION-	PREP
	RECOVERY	LIMITS	RPD	LIMITS		ANALYSIS DATE	BATCH #
Total Sulfide			WO#: L3D421EV-MS/L3D421EW-MSD		MS Lot-Sample #:	C0F240579-020	
	86	(75 - 125)			SW846 9030B/9034	06/25/10	0176085
	88	(75 - 125)	0.03	(0-20)	SW846 9030B/9034	06/25/10	0176085
			Dilution Factor: 1				
			Analysis Time...: 13:05				
			MS Run #.....: 0176043				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F230532

Work Order #...: L3APP-SMP
L3APP-DUP

Matrix.....: SOLID

Date Sampled...: 06/18/10

Date Received...: 06/23/10

% Moisture.....: 25

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	74.7	73.6	%	1.5	(0-20)	SD Lot-Sample #: C0F230532-001 SM20 2540G	06/30-07/01/10	0181024
			Dilution Factor: 1			Analysis Time..: 08:18	MS Run Number..: 0181010	

Analytical Report for

EA Engineering

Certificate of Analysis No.: 10062518

Project Manager: Pete Lekas

Project Name : Gude Landfill

Project Location: Rockville, MD



July 16, 2010

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL
PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047

PHASE SEPARATION SCIENCE, INC.



July 16, 2010

Pete Lekas
EA Engineering
15 Loveton Circle
Sparks, MD 21152

Reference: PSS Work Order No: **10062518**
Project Name : Gude Landfill
Project Location: Rockville, MD

Dear Pete Lekas :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **10062518**.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on July 30, 2010. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Dan Prucnal

Laboratory Manager



Case Narrative Summary

Client Name: EA Engineering

Project Name: Gude Landfill

Project ID: N/A

Work Order Number: 10062518

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/25/2010 at 04:23 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
10062518-001	Gude-MW13A-SO-4 to 6	SOIL	06/25/2010 13:20
10062518-002	Gude-MW7-SO-8 to 10	SOIL	06/23/2010 13:30
10062518-003	Gude-MW8-SO-8 to 10	SOIL	06/23/2010 10:45
10062518-004	Gude-MW6-SO-12 to 14	SOIL	06/22/2010 13:30
10062518-005	Gude-MW13B-SO-2 to 4	SOIL	06/25/2010 14:50

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in the Sample Receipt Checklist.

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Notes:

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than one-half of the reporting limit.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6	Date/Time Sampled: 06/25/2010 13:20	PSS Sample ID: 10062518-001
Matrix: SOIL	Date/Time Received: 06/25/2010 16:23	% Solids: 82

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Arsenic	3.5	mg/kg	0.5		1	0.3	07/06/10	07/08/10 13:12	1034
Barium	52	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Beryllium	ND	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Cadmium	ND	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Chromium	33	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Cobalt	29	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Copper	61	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Lead	16	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Mercury	ND	mg/kg	0.11		1	0.05	07/06/10	07/08/10 13:12	1034
Nickel	28	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Selenium	ND	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Silver	ND	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Thallium	ND	mg/kg	2.2		1	1.1	07/06/10	07/08/10 13:12	1034
Tin	ND	mg/kg	5.5		1	2.7	07/06/10	07/08/10 13:12	1034
Vanadium	49	mg/kg	2.7		1	1.4	07/06/10	07/08/10 13:12	1034
Zinc	100	mg/kg	11		1	5.5	07/06/10	07/09/10 13:30	1034

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 ROUTE 40 WEST
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 410-747-8770
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 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
beta-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
delta-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Heptachlor	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Aldrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
4,4-DDE	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Endosulfan I	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Dieldrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Endrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
4,4-DDD	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Endosulfan II	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
4,4-DDT	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Methoxychlor	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Endrin ketone	ND	ug/kg	24		1	12	07/06/10	07/07/10 13:41	1029
Toxaphene	ND	ug/kg	240		1	120	07/06/10	07/07/10 13:41	1029
Chlordane	ND	ug/kg	240		1	120	07/06/10	07/07/10 13:41	1029

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 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:29	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	240		1	120	07/06/10	07/06/10 18:07	1029
2,4,5-TP (Silvex)	ND	ug/kg	24		1	12	07/06/10	07/06/10 18:07	1029
2,4,5-T	ND	ug/kg	24		1	12	07/06/10	07/06/10 18:07	1029
Dinoseb	ND	ug/kg	120		1	60	07/06/10	07/06/10 18:07	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Chloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Vinyl Chloride	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Bromomethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Chloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Acetone	55	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Methylene chloride	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Vinyl acetate	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
2-Butanone (MEK)	ND	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Bromochloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Chloroform	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Benzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Dibromomethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Carbon Disulfide	ND	ug/kg	10		1	5.2	06/29/10	06/29/10 23:35	1035
Trichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Acrylonitrile	ND	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035
Bromodichloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Toluene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
2-Hexanone (MBK)	ND	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Dibromochloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Acrolein	ND	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Bromoform	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Tetrachloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Chlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Ethylbenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
m&p-Xylene	ND	ug/kg	10		1	5.2	06/29/10	06/29/10 23:35	1035
Styrene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
o-Xylene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	42		1	21	06/29/10	06/29/10 23:35	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Iodomethane	ND	ug/kg	21		1	10	06/29/10	06/29/10 23:35	1035
Naphthalene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/29/10 23:35	1035
Hexanal (TIC)	9	ug/kg	10		1	5.2	06/29/10	06/29/10 23:35	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Acenaphthylene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Acetophenone	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Anthracene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Benzo(a)anthracene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Benzo(a)pyrene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Benzo(b)fluoranthene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Benzo(g,h,i)perylene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Benzo(k)fluoranthene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Benzyl butyl phthalate	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
bis(2-chloroethyl) ether	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
4-Bromophenylphenyl ether	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Di-n-butyl phthalate	ND	ug/kg	400		1	200	07/01/10	07/01/10 22:45	1040
4-Chloro-3-methylphenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
4-Chloroaniline	ND	ug/kg	400		1	200	07/01/10	07/01/10 22:45	1040
2-Chloronaphthalene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2-Chlorophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Chrysene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Dibenz(a,h)anthracene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Dibenzofuran	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
3,3-Dichlorobenzidine	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2,4-Dichlorophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Diethyl phthalate	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Dimethyl phthalate	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2,4-Dimethylphenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	400		1	200	07/01/10	07/01/10 22:45	1040
2,4-Dinitrotoluene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2,6-Dinitrotoluene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Fluoranthene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Fluorene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Hexachlorobenzene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Hexachlorobutadiene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Hexachlorocyclopentadiene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Hexachloroethane	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Isophorone	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2-Methylnaphthalene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2-Methylphenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
3&4-Methylphenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
4-Nitroaniline	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
3-Nitroaniline	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2-Nitroaniline	ND	ug/kg	400		1	200	07/01/10	07/01/10 22:45	1040
Nitrobenzene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2-Nitrophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
4-Nitrophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
N-Nitrosodimethylamine	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
N-Nitrosodiphenylamine	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Di-n-octyl phthalate	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Pentachlorophenol	ND	ug/kg	400		1	200	07/01/10	07/01/10 22:45	1040
Phenanthrene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Phenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Pyrene	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13A-SO-4 to 6 **Date/Time Sampled: 06/25/2010 13:20** **PSS Sample ID: 10062518-001**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 82**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
2,4,5-Trichlorophenol	ND	ug/kg	200		1	100	07/01/10	07/01/10 22:45	1040
Erucylamide (TIC)	360	ug/kg	160		1	100	07/01/10	07/01/10 22:45	1040
Squalene (TIC)	240	ug/kg	160		1	100	07/01/10	07/01/10 22:45	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	07/06/10	07/06/10 00:00	1022

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Arsenic	3.1	mg/kg	0.5		1	0.3	07/06/10	07/08/10 13:17	1034
Barium	57	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Beryllium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Cadmium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Chromium	11	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Cobalt	36	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Copper	63	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Lead	16	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Mercury	ND	mg/kg	0.10		1	0.05	07/06/10	07/08/10 13:17	1034
Nickel	26	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Selenium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Silver	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Thallium	ND	mg/kg	2.0		1	1	07/06/10	07/08/10 13:17	1034
Tin	ND	mg/kg	5.1		1	2.6	07/06/10	07/08/10 13:17	1034
Vanadium	14	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:17	1034
Zinc	14	mg/kg	10		1	5.1	07/06/10	07/09/10 13:36	1034

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
gamma-BHC (Lindane)	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
beta-BHC	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
delta-BHC	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Heptachlor	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Aldrin	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Heptachlor epoxide	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
gamma-Chlordane	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
alpha-Chlordane	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
4,4-DDE	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Endosulfan I	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Dieldrin	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Endrin	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
4,4-DDD	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Endosulfan II	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
4,4-DDT	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Endrin aldehyde	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Methoxychlor	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Endosulfan sulfate	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Endrin ketone	ND	ug/kg	23		1	11	07/06/10	07/07/10 14:09	1029
Toxaphene	ND	ug/kg	230		1	110	07/06/10	07/07/10 14:09	1029
Chlordane	ND	ug/kg	230		1	110	07/06/10	07/07/10 14:09	1029

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 13:57	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	230		1	120	07/06/10	07/06/10 20:17	1029
2,4,5-TP (Silvex)	ND	ug/kg	23		1	12	07/06/10	07/06/10 20:17	1029
2,4,5-T	ND	ug/kg	23		1	12	07/06/10	07/06/10 20:17	1029
Dinoseb	ND	ug/kg	120		1	58	07/06/10	07/06/10 20:17	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Chloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Vinyl Chloride	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Bromomethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Chloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Acetone	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Methylene chloride	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Vinyl acetate	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
2-Butanone (MEK)	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Bromochloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Chloroform	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Benzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Dibromomethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Carbon Disulfide	ND	ug/kg	11		1	5.3	06/29/10	06/30/10 00:04	1035
Trichloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Acrylonitrile	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035
Bromodichloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Toluene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
2-Hexanone (MBK)	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Dibromochloromethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Acrolein	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Bromoform	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Tetrachloroethene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Chlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Ethylbenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
m&p-Xylene	ND	ug/kg	11		1	5.3	06/29/10	06/30/10 00:04	1035
Styrene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
o-Xylene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	42		1	21	06/29/10	06/30/10 00:04	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
Iodomethane	ND	ug/kg	21		1	11	06/29/10	06/30/10 00:04	1035
Naphthalene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.6	06/29/10	06/30/10 00:04	1035

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Acenaphthylene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Acetophenone	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Anthracene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Benzo(a)anthracene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Benzo(a)pyrene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Benzo(b)fluoranthene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Benzo(g,h,i)perylene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Benzo(k)fluoranthene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Benzyl butyl phthalate	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
bis(2-chloroethyl) ether	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
4-Bromophenylphenyl ether	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Di-n-butyl phthalate	ND	ug/kg	390		1	200	07/01/10	07/01/10 23:14	1040
4-Chloro-3-methylphenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
4-Chloroaniline	ND	ug/kg	390		1	200	07/01/10	07/01/10 23:14	1040
2-Chloronaphthalene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2-Chlorophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Chrysene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Dibenz(a,h)anthracene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Dibenzofuran	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
3,3-Dichlorobenzidine	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2,4-Dichlorophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Diethyl phthalate	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Dimethyl phthalate	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2,4-Dimethylphenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	390		1	200	07/01/10	07/01/10 23:14	1040
2,4-Dinitrotoluene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2,6-Dinitrotoluene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Fluoranthene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Fluorene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Hexachlorobenzene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Hexachlorobutadiene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Hexachlorocyclopentadiene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Hexachloroethane	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Isophorone	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2-Methylnaphthalene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2-Methylphenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
3&4-Methylphenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
4-Nitroaniline	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
3-Nitroaniline	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2-Nitroaniline	ND	ug/kg	390		1	200	07/01/10	07/01/10 23:14	1040
Nitrobenzene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2-Nitrophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
4-Nitrophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
N-Nitrosodimethylamine	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
N-Nitrosodiphenylamine	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Di-n-octyl phthalate	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Pentachlorophenol	ND	ug/kg	390		1	200	07/01/10	07/01/10 23:14	1040
Phenanthrene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Phenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Pyrene	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW7-SO-8 to 10 **Date/Time Sampled: 06/23/2010 13:30** **PSS Sample ID: 10062518-002**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 85**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
2,4,5-Trichlorophenol	ND	ug/kg	200		1	98	07/01/10	07/01/10 23:14	1040
Erucylamide (TIC)	270	ug/kg	160		1	98	07/01/10	07/01/10 23:14	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	2.9		1	1.5	07/06/10	07/06/10 00:00	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Arsenic	3.8	mg/kg	0.5		1	0.2	07/06/10	07/08/10 13:24	1034
Barium	50	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Beryllium	ND	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Cadmium	ND	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Chromium	35	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Cobalt	23	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Copper	38	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Lead	17	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Mercury	ND	mg/kg	0.09		1	0.05	07/06/10	07/08/10 13:24	1034
Nickel	20	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Selenium	ND	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Silver	ND	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Thallium	ND	mg/kg	1.8		1	0.9	07/06/10	07/08/10 13:24	1034
Tin	ND	mg/kg	4.6		1	2.3	07/06/10	07/08/10 13:24	1034
Vanadium	44	mg/kg	2.3		1	1.1	07/06/10	07/08/10 13:24	1034
Zinc	49	mg/kg	9.2		1	4.6	07/06/10	07/09/10 13:42	1034

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
beta-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
delta-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Heptachlor	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Aldrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
4,4-DDE	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Endosulfan I	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Dieldrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Endrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
4,4-DDD	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Endosulfan II	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
4,4-DDT	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Methoxychlor	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Endrin ketone	ND	ug/kg	24		1	12	07/06/10	07/07/10 14:37	1029
Toxaphene	ND	ug/kg	240		1	120	07/06/10	07/07/10 14:37	1029
Chlordane	ND	ug/kg	240		1	120	07/06/10	07/07/10 14:37	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:27	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	240		1	120	07/06/10	07/06/10 19:45	1029
2,4,5-TP (Silvex)	ND	ug/kg	24		1	12	07/06/10	07/06/10 19:45	1029
2,4,5-T	ND	ug/kg	24		1	12	07/06/10	07/06/10 19:45	1029
Dinoseb	ND	ug/kg	120		1	59	07/06/10	07/06/10 19:45	1029

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CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Chloromethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Vinyl Chloride	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Bromomethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Chloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Acetone	36	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035
Trichlorofluoromethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,1-Dichloroethene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Methylene chloride	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
trans-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,1-Dichloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Vinyl acetate	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
2-Butanone (MEK)	ND	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035
cis-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Bromochloromethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Chloroform	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
2,2-Dichloropropane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,1,1-Trichloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,2-Dichloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,1-Dichloropropene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Carbon tetrachloride	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Benzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Dibromomethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,2-Dichloropropane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Carbon Disulfide	ND	ug/kg	11		1	5.7	06/29/10	06/30/10 00:33	1035
Trichloroethene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Acrylonitrile	ND	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035
Bromodichloromethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
cis-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,1,2-Trichloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Toluene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,3-Dichloropropane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
2-Hexanone (MBK)	ND	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035
1,2-Dibromoethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Dibromochloromethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Acrolein	ND	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Bromoform	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Tetrachloroethene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Chlorobenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Ethylbenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
m&p-Xylene	ND	ug/kg	11		1	5.7	06/29/10	06/30/10 00:33	1035
Styrene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
o-Xylene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,2,3-Trichloropropane	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,3-Dichlorobenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,4-Dichlorobenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,2-Dichlorobenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	45		1	23	06/29/10	06/30/10 00:33	1035
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
Iodomethane	ND	ug/kg	23		1	11	06/29/10	06/30/10 00:33	1035
Naphthalene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	2.8	06/29/10	06/30/10 00:33	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Semivolatile Organics Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Acenaphthylene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Acetophenone	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Anthracene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Benzo(a)anthracene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Benzo(a)pyrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Benzo(b)fluoranthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Benzo(g,h,i)perylene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Benzo(k)fluoranthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Benzyl butyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
bis(2-chloroethyl) ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
4-Bromophenylphenyl ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Di-n-butyl phthalate	ND	ug/kg	410		1	210	07/01/10	07/02/10 17:47	1040
4-Chloro-3-methylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
4-Chloroaniline	ND	ug/kg	410		1	210	07/01/10	07/02/10 17:47	1040
2-Chloronaphthalene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2-Chlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Chrysene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Dibenz(a,h)anthracene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Dibenzofuran	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
3,3-Dichlorobenzidine	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2,4-Dichlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Diethyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Dimethyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2,4-Dimethylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Semivolatile Organics Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	410		1	210	07/01/10	07/02/10 17:47	1040
2,4-Dinitrotoluene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2,6-Dinitrotoluene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Fluoranthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Fluorene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Hexachlorobenzene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Hexachlorobutadiene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Hexachlorocyclopentadiene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Hexachloroethane	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Isophorone	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2-Methylnaphthalene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2-Methylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
3&4-Methylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
4-Nitroaniline	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
3-Nitroaniline	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2-Nitroaniline	ND	ug/kg	410		1	210	07/01/10	07/02/10 17:47	1040
Nitrobenzene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2-Nitrophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
4-Nitrophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
N-Nitrosodimethylamine	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
N-Nitrosodiphenylamine	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Di-n-octyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Pentachlorophenol	ND	ug/kg	410		1	210	07/01/10	07/02/10 17:47	1040
Phenanthrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Phenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Pyrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW8-SO-8 to 10 **Date/Time Sampled: 06/23/2010 10:45** **PSS Sample ID: 10062518-003**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 81**

Semivolatile Organics Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
2,4,5-Trichlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 17:47	1040
Dibenzylidene 4,4'-biphenylenediam (TIC)	430	ug/kg	160		1	100	07/01/10	07/02/10 17:47	1040
9-Octadecenamide, (Z)- (TIC)	190	ug/kg	160		1	100	07/01/10	07/02/10 17:47	1040
Squalene (TIC)	250	ug/kg	160		1	100	07/01/10	07/02/10 17:47	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.1		1	1.5	07/06/10	07/06/10 00:00	1022

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Arsenic	3.3	mg/kg	0.5		1	0.3	07/06/10	07/08/10 13:30	1034
Barium	39	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Beryllium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Cadmium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Chromium	44	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Cobalt	28	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Copper	55	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Lead	14	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Mercury	ND	mg/kg	0.11		1	0.05	07/06/10	07/08/10 13:30	1034
Nickel	28	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Selenium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Silver	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Thallium	ND	mg/kg	2.1		1	1.1	07/06/10	07/08/10 13:30	1034
Tin	ND	mg/kg	5.2		1	2.6	07/06/10	07/08/10 13:30	1034
Vanadium	41	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:30	1034
Zinc	37	mg/kg	11		1	5.2	07/06/10	07/09/10 13:48	1034

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
beta-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
delta-BHC	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Heptachlor	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Aldrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
4,4-DDE	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Endosulfan I	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Dieldrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Endrin	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
4,4-DDD	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Endosulfan II	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
4,4-DDT	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Methoxychlor	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Endrin ketone	ND	ug/kg	24		1	12	07/06/10	07/07/10 17:53	1029
Toxaphene	ND	ug/kg	240		1	120	07/06/10	07/07/10 17:53	1029
Chlordane	ND	ug/kg	240		1	120	07/06/10	07/07/10 17:53	1029

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	240		1	120	07/06/10	07/06/10 19:12	1029
2,4,5-TP (Silvex)	ND	ug/kg	24		1	12	07/06/10	07/06/10 19:12	1029
2,4,5-T	ND	ug/kg	24		1	12	07/06/10	07/06/10 19:12	1029
Dinoseb	ND	ug/kg	120		1	61	07/06/10	07/06/10 19:12	1029

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Chloromethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Vinyl Chloride	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Bromomethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Chloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Acetone	68	ug/kg	19		1	9.6	06/29/10	06/30/10 01:02	1035
Trichlorofluoromethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,1-Dichloroethene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Methylene chloride	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,1-Dichloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Vinyl acetate	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
2-Butanone (MEK)	17	ug/kg	19	J	1	9.6	06/29/10	06/30/10 01:02	1035
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Bromochloromethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Chloroform	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
2,2-Dichloropropane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,2-Dichloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,1-Dichloropropene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Carbon tetrachloride	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Benzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Dibromomethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,2-Dichloropropane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Carbon Disulfide	ND	ug/kg	10		1	4.8	06/29/10	06/30/10 01:02	1035
Trichloroethene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Acrylonitrile	ND	ug/kg	19		1	9.6	06/29/10	06/30/10 01:02	1035
Bromodichloromethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	19		1	9.6	06/29/10	06/30/10 01:02	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill

Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Toluene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,3-Dichloropropane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
2-Hexanone (MBK)	ND	ug/kg	19		1	9.6	06/29/10	06/30/10 01:02	1035
1,2-Dibromoethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Dibromochloromethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Acrolein	ND	ug/kg	19		1	9.6	06/29/10	06/30/10 01:02	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Bromoform	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Tetrachloroethene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Chlorobenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Ethylbenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
m&p-Xylene	ND	ug/kg	10		1	4.8	06/29/10	06/30/10 01:02	1035
Styrene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
o-Xylene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	38		1	19	06/29/10	06/30/10 01:02	1035
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Iodomethane	ND	ug/kg	19		1	9.6	06/29/10	06/30/10 01:02	1035
Naphthalene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.4	06/29/10	06/30/10 01:02	1035
Pentanal (TIC)	5	ug/kg	10		1	4.8	06/29/10	06/30/10 01:02	1035
Hexanal (TIC)	7	ug/kg	10		1	4.8	06/29/10	06/30/10 01:02	1035
Benzaldehyde (TIC)	6	ug/kg	10		1	4.8	06/29/10	06/30/10 01:02	1035

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Semivolatile Organics Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Acenaphthylene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Acetophenone	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Anthracene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Benzo(a)anthracene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Benzo(a)pyrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Benzo(b)fluoranthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Benzo(g,h,i)perylene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Benzo(k)fluoranthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Benzyl butyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
bis(2-chloroethyl) ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
4-Bromophenylphenyl ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Di-n-butyl phthalate	ND	ug/kg	420		1	210	07/01/10	07/02/10 19:35	1040
4-Chloro-3-methylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
4-Chloroaniline	ND	ug/kg	420		1	210	07/01/10	07/02/10 19:35	1040
2-Chloronaphthalene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2-Chlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Chrysene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Dibenz(a,h)anthracene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Dibenzofuran	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
3,3-Dichlorobenzidine	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2,4-Dichlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Diethyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Dimethyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2,4-Dimethylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040

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CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Semivolatile Organics Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	420		1	210	07/01/10	07/02/10 19:35	1040
2,4-Dinitrotoluene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2,6-Dinitrotoluene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Fluoranthene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Fluorene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Hexachlorobenzene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Hexachlorobutadiene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Hexachlorocyclopentadiene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Hexachloroethane	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Isophorone	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2-Methylnaphthalene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2-Methylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
3&4-Methylphenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
4-Nitroaniline	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
3-Nitroaniline	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2-Nitroaniline	ND	ug/kg	420		1	210	07/01/10	07/02/10 19:35	1040
Nitrobenzene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2-Nitrophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
4-Nitrophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
N-Nitrosodimethylamine	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
N-Nitrosodiphenylamine	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Di-n-octyl phthalate	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Pentachlorophenol	ND	ug/kg	420		1	210	07/01/10	07/02/10 19:35	1040
Phenanthrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Phenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Pyrene	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW6-SO-12 to 14 **Date/Time Sampled: 06/22/2010 13:30** **PSS Sample ID: 10062518-004**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 80**

Semivolatile Organics Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
2,4,5-Trichlorophenol	ND	ug/kg	210		1	100	07/01/10	07/02/10 19:35	1040
Squalene (TIC)	270	ug/kg	170		1	100	07/01/10	07/02/10 19:35	1040
9-Octadecenamide, (Z)- (TIC)	190	ug/kg	170		1	100	07/01/10	07/02/10 19:35	1040
Dibenzylidene 4,4'-biphenylenediam (TIC)	340	ug/kg	170		1	100	07/01/10	07/02/10 19:35	1040
Tridecanoic acid, methyl ester (TIC)	190	ug/kg	170		1	100	07/01/10	07/02/10 19:35	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.1		1	1.6	07/06/10	07/06/10 00:00	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Arsenic	3.8	mg/kg	0.5		1	0.3	07/06/10	07/08/10 13:36	1034
Barium	110	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Beryllium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Cadmium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Chromium	26	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Cobalt	25	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Copper	35	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Lead	23	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Mercury	ND	mg/kg	0.10		1	0.05	07/06/10	07/08/10 13:36	1034
Nickel	19	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Selenium	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Silver	ND	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Thallium	ND	mg/kg	2.1		1	1	07/06/10	07/08/10 13:36	1034
Tin	ND	mg/kg	5.2		1	2.6	07/06/10	07/08/10 13:36	1034
Vanadium	64	mg/kg	2.6		1	1.3	07/06/10	07/08/10 13:36	1034
Zinc	68	mg/kg	10		1	5.2	07/06/10	07/09/10 13:55	1034

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
gamma-BHC (Lindane)	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
beta-BHC	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
delta-BHC	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Heptachlor	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Aldrin	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Heptachlor epoxide	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
gamma-Chlordane	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
alpha-Chlordane	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
4,4-DDE	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Endosulfan I	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Dieldrin	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Endrin	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
4,4-DDD	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Endosulfan II	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
4,4-DDT	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Endrin aldehyde	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Methoxychlor	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Endosulfan sulfate	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Endrin ketone	ND	ug/kg	22		1	11	07/06/10	07/07/10 15:05	1029
Toxaphene	ND	ug/kg	220		1	110	07/06/10	07/07/10 15:05	1029
Chlordane	ND	ug/kg	220		1	110	07/06/10	07/07/10 15:05	1029

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

PCBs Analytical Method: SW846 8082A Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/06/10	07/07/10 14:56	1029

Chlorinated Herbicides Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	220		1	110	07/06/10	07/06/10 18:40	1029
2,4,5-TP (Silvex)	ND	ug/kg	22		1	11	07/06/10	07/06/10 18:40	1029
2,4,5-T	ND	ug/kg	22		1	11	07/06/10	07/06/10 18:40	1029
Dinoseb	ND	ug/kg	110		1	55	07/06/10	07/06/10 18:40	1029

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CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Chloromethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Vinyl Chloride	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Bromomethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Chloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Acetone	84	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035
Trichlorofluoromethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,1-Dichloroethene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Methylene chloride	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
trans-1,2-Dichloroethene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,1-Dichloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Vinyl acetate	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
2-Butanone (MEK)	ND	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035
cis-1,2-Dichloroethene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Bromochloromethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Chloroform	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
2,2-Dichloropropane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,1,1-Trichloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,2-Dichloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,1-Dichloropropene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Carbon tetrachloride	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Benzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Dibromomethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,2-Dichloropropane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Carbon Disulfide	ND	ug/kg	12		1	5.9	06/29/10	06/30/10 01:30	1035
Trichloroethene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Acrylonitrile	ND	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035
Bromodichloromethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
cis-1,3-Dichloropropene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518

EA Engineering, Sparks, MD

July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,1,2-Trichloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Toluene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,3-Dichloropropane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
2-Hexanone (MBK)	ND	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035
1,2-Dibromoethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Dibromochloromethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Acrolein	ND	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Bromoform	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Tetrachloroethene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Chlorobenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Ethylbenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
m&p-Xylene	ND	ug/kg	12		1	5.9	06/29/10	06/30/10 01:30	1035
Styrene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
o-Xylene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,2,3-Trichloropropane	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,3-Dichlorobenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,4-Dichlorobenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,2-Dichlorobenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,2-Dibromo-3-chloropropane	ND	ug/kg	47		1	24	06/29/10	06/30/10 01:30	1035
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Iodomethane	ND	ug/kg	24		1	12	06/29/10	06/30/10 01:30	1035
Naphthalene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	2.9	06/29/10	06/30/10 01:30	1035
Hexanal (TIC)	24	ug/kg	12		1	5.9	06/29/10	06/30/10 01:30	1035
Camphene (TIC)	6	ug/kg	12		1	5.9	06/29/10	06/30/10 01:30	1035
1S-.alpha.-Pinene (TIC)	8	ug/kg	12		1	5.9	06/29/10	06/30/10 01:30	1035

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CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Semivolatile Organics Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Acenaphthylene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Acetophenone	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Anthracene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Benzo(a)anthracene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Benzo(a)pyrene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Benzo(b)fluoranthene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Benzo(g,h,i)perylene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Benzo(k)fluoranthene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Benzyl butyl phthalate	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
bis(2-chloroethoxy) methane	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
bis(2-chloroethyl) ether	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
bis(2-chloroisopropyl) ether	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
bis(2-ethylhexyl) phthalate	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
4-Bromophenylphenyl ether	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Di-n-butyl phthalate	ND	ug/kg	380		1	190	07/01/10	07/02/10 20:04	1040
4-Chloro-3-methylphenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
4-Chloroaniline	ND	ug/kg	380		1	190	07/01/10	07/02/10 20:04	1040
2-Chloronaphthalene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2-Chlorophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
4-Chlorophenyl phenyl ether	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Chrysene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Dibenz(a,h)anthracene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Dibenzofuran	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
3,3-Dichlorobenzidine	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2,4-Dichlorophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Diethyl phthalate	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Dimethyl phthalate	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2,4-Dimethylphenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
4,6-Dinitro-2-methyl phenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040

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 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Semivolatile Organics Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	380		1	190	07/01/10	07/02/10 20:04	1040
2,4-Dinitrotoluene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2,6-Dinitrotoluene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Fluoranthene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Fluorene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Hexachlorobenzene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Hexachlorobutadiene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Hexachlorocyclopentadiene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Hexachloroethane	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Isophorone	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2-Methylnaphthalene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2-Methylphenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
3&4-Methylphenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
4-Nitroaniline	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
3-Nitroaniline	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2-Nitroaniline	ND	ug/kg	380		1	190	07/01/10	07/02/10 20:04	1040
Nitrobenzene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2-Nitrophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
4-Nitrophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
N-Nitrosodimethylamine	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
N-Nitrosodi-n-propylamine	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
N-Nitrosodiphenylamine	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Di-n-octyl phthalate	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Pentachlorophenol	ND	ug/kg	380		1	190	07/01/10	07/02/10 20:04	1040
Phenanthrene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Phenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Pyrene	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2,3,4,6-Tetrachlorophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040

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 ROUTE 40 WEST
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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10062518
 EA Engineering, Sparks, MD
 July 16, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW13B-SO-2 to 4 **Date/Time Sampled: 06/25/2010 14:50** **PSS Sample ID: 10062518-005**
Matrix: SOIL **Date/Time Received: 06/25/2010 16:23** **% Solids: 88**

Semivolatile Organics Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
2,4,5-Trichlorophenol	ND	ug/kg	190		1	94	07/01/10	07/02/10 20:04	1040
Pentadecanoic acid, 14-methyl-, me (TIC)	220	ug/kg	150		1	94	07/01/10	07/02/10 20:04	1040
Tetradecanamide (TIC)	730	ug/kg	150		1	94	07/01/10	07/02/10 20:04	1040
1-Naphthalenepropanol, .alpha.-eth (TIC)	220	ug/kg	150		1	94	07/01/10	07/02/10 20:04	1040

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	2.8		1	1.4	07/06/10	07/06/10 00:00	1022



Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number 10062518 **Received By** Lynn Moran
Client Name EA Engineering **Date Received** 06/25/2010 04:23:00 PM
Project Name Gude Landfill **Delivered By** Client
Project Number N/A **Tracking No** Not Applicable
Disposal Date: 07/30/2010 **Logged In By** Lynn Moran

Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seals	Not Applicable	Temp (deg C)	5
Seal Condition	Not Applicable	Temp Blank Present	No

Documentation

COC agrees with sample labels? Yes or No **Sampler Name:** Not Provided
Chain of Custody (COC) Yes or No

Sample Container

Appropriate for Specified Analysis? Yes No **Custody Seal(s)** Absent
Intact? **Custody Seal(s) Intact?** Not Applicable
Labeled and Labels Legible **Seal(s) Signed / Dated** Not Applicable
Total No. of Samples Received 5 **Total No. of Containers Received** 40

Preservation

	Yes	No	N/A
Metals (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cyanides (pH>12)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sulfide (pH>9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOC, COD, Phenols (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOX, TKN, NH3, Total Phos (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOC, BTEX (VOA Vials Rcvd Preserved) (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do VOA vials have zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling.

Samples Inspected/Checklist Completed By: LM

Date: 06/25/10

PM Review and Approval: [Signature]

Date: 6/30/10

Analytical Data Package Information Summary for W.O 10062518

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
AD2216A	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1041	S	83319	83319	06/25/2010	06/25/2010	06/28/2010	06/28/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1041	S	83319	83319	06/25/2010	06/25/2010	06/28/2010	06/28/2010
	Gude-MW6-SO-12 to 14	Initial	10062518-004	1041	S	83319	83319	06/22/2010	06/25/2010	06/28/2010	06/28/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1041	S	83319	83319	06/23/2010	06/25/2010	06/28/2010	06/28/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1041	S	83319	83319	06/23/2010	06/25/2010	06/28/2010	06/28/2010
	33471-1-BKS	BKS	33471-1-BKS	1034	S	33471	83484	-----	06/25/2010	07/06/2010	07/07/2010
	33471-1-BLK	BLK	33471-1-BLK	1034	S	33471	83484	-----	06/25/2010	07/06/2010	07/07/2010
	S-1 S	MS	10070610-001 S	1034	S	33471	83484	07/06/2010	06/25/2010	07/06/2010	07/07/2010
	S-1 SD	MSD	10070610-001 SD	1034	S	33471	83484	07/06/2010	06/25/2010	07/06/2010	07/07/2010
	33471-1-BKS	BKS	33471-1-BKS	1034	S	33471	83507	-----	06/25/2010	07/06/2010	07/08/2010
33471-1-BLK	BLK	33471-1-BLK	1034	S	33471	83507	-----	06/25/2010	07/06/2010	07/08/2010	
Gude-MW13A-SO-4 to 6	Initial	10062518-001	1034	S	33471	83507	06/25/2010	06/25/2010	07/06/2010	07/08/2010	
Gude-MW13B-SO-2 to 4	Initial	10062518-005	1034	S	33471	83507	06/25/2010	06/25/2010	07/06/2010	07/08/2010	
Gude-MW6-SO-12 to 14	Initial	10062518-004	1034	S	33471	83507	06/22/2010	06/25/2010	07/06/2010	07/08/2010	
Gude-MW7-SO-8 to 10	Initial	10062518-002	1034	S	33471	83507	06/23/2010	06/25/2010	07/06/2010	07/08/2010	
Gude-MW8-SO-8 to 10	Initial	10062518-003	1034	S	33471	83507	06/23/2010	06/25/2010	07/06/2010	07/08/2010	
103120162 S	MS	10070706-001 S	1034	W	33506	83537	06/24/2010	06/25/2010	07/09/2010	07/09/2010	
103120162 SD	MSD	10070706-001 SD	1034	W	33506	83537	06/24/2010	06/25/2010	07/09/2010	07/09/2010	
33471-1-BKS	BKS	33471-1-BKS	1034	S	33471	83537	-----	06/25/2010	07/06/2010	07/09/2010	
33471-1-BLK	BLK	33471-1-BLK	1034	S	33471	83537	-----	06/25/2010	07/06/2010	07/09/2010	
33506-1-BKS	BKS	33506-1-BKS	1034	W	33506	83537	-----	06/25/2010	07/09/2010	07/09/2010	
33506-1-BLK	BLK	33506-1-BLK	1034	W	33506	83537	-----	06/25/2010	07/09/2010	07/09/2010	
Gude-MW13A-SO-4 to 6 DL	Reanalysis	10062518-001	1034	S	33471	83537	06/25/2010	06/25/2010	07/06/2010	07/09/2010	

Analytical Data Package Information Summary for W.O 10062518

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 6020	Gude-MW13B-SO-2 to 4 DL	Reanalysis	10062518-005	1034	S	33471	83537	06/25/2010	06/25/2010	07/06/2010	07/09/2010
	Gude-MW6-SO-12 to 14 DL	Reanalysis	10062518-004	1034	S	33471	83537	06/22/2010	06/25/2010	07/06/2010	07/09/2010
	Gude-MW7-SO-8 to 10 DL	Reanalysis	10062518-002	1034	S	33471	83537	06/23/2010	06/25/2010	07/06/2010	07/09/2010
	Gude-MW8-SO-8 to 10 DL	Reanalysis	10062518-003	1034	S	33471	83537	06/23/2010	06/25/2010	07/06/2010	07/09/2010
	33468-1-BKS	BKS	33468-1-BKS	1029	S	33468	83499	-----	06/25/2010	07/06/2010	07/07/2010
SW846 8081B	33468-1-BLK	BLK	33468-1-BLK	1029	S	33468	83499	-----	06/25/2010	07/06/2010	07/07/2010
	33468-1-BSD	BSD	33468-1-BSD	1029	S	33468	83499	-----	06/25/2010	07/06/2010	07/07/2010
	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1029	S	33468	83499	06/25/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1029	S	33468	83499	06/25/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW6-SO-12 to 14	Initial	10062518-004	1029	S	33468	83499	06/22/2010	06/25/2010	07/06/2010	07/07/2010
SW846 8082A	Gude-MW6-SO-12 to 14 S	MS	10062518-004 S	1029	S	33468	83499	06/22/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW6-SO-12 to 14 SD	MSD	10062518-004 SD	1029	S	33468	83499	06/22/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1029	S	33468	83499	06/23/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1029	S	33468	83499	06/23/2010	06/25/2010	07/06/2010	07/07/2010
	33470-1-BKS	BKS	33470-1-BKS	1029	S	33470	83487	-----	06/25/2010	07/06/2010	07/07/2010
SW846 8082A	33470-1-BLK	BLK	33470-1-BLK	1029	S	33470	83487	-----	06/25/2010	07/06/2010	07/07/2010
	33470-1-BSD	BSD	33470-1-BSD	1029	S	33470	83487	-----	06/25/2010	07/06/2010	07/07/2010
	Gude-MW6-SO-12 to 14	Initial	10062518-004	1029	S	33470	83487	06/22/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW6-SO-12 to 14 S	MS	10062518-004 S	1029	S	33470	83487	06/22/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW6-SO-12 to 14 SD	MSD	10062518-004 SD	1029	S	33470	83487	06/22/2010	06/25/2010	07/06/2010	07/07/2010

Analytical Data Package Information Summary for W.O 10062518

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mix	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8082A	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1029	S	33470	83488	06/25/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1029	S	33470	83488	06/25/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1029	S	33470	83488	06/23/2010	06/25/2010	07/06/2010	07/07/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1029	S	33470	83488	06/23/2010	06/25/2010	07/06/2010	07/07/2010
SW846 8151A	33456-1-BKS	BKS	33456-1-BKS	1029	S	33456	83469	-----	06/25/2010	07/06/2010	07/06/2010
	33456-1-BLK	BLK	33456-1-BLK	1029	S	33456	83469	-----	06/25/2010	07/06/2010	07/06/2010
	33456-1-BSD	BSD	33456-1-BSD	1029	S	33456	83469	-----	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1029	S	33456	83469	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13A-SO-4 to 6 S	MS	10062518-001 S	1029	S	33456	83469	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13A-SO-4 to 6 SD	MSD	10062518-001 SD	1029	S	33456	83469	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1029	S	33456	83469	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW6-SO-12 to 14	Initial	10062518-004	1029	S	33456	83469	06/22/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1029	S	33456	83469	06/23/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1029	S	33456	83469	06/23/2010	06/25/2010	07/06/2010	07/06/2010
SW846 8260B	33414-1-BKS	BKS	33414-1-BKS	1035	S	33414	83371	-----	06/25/2010	06/29/2010	06/29/2010
	33414-1-BLK	BLK	33414-1-BLK	1035	S	33414	83371	-----	06/25/2010	06/29/2010	06/29/2010
	33414-1-BSD	BSD	33414-1-BSD	1035	S	33414	83371	-----	06/25/2010	06/29/2010	06/29/2010
	Area 2 Trash 1-001 S	MS	10062811-001 S	1035	S	33414	83371	06/28/2010	06/25/2010	06/29/2010	06/30/2010
	Area 2 Trash 1-001 SD	MSD	10062811-001 SD	1035	S	33414	83371	06/28/2010	06/25/2010	06/29/2010	06/30/2010
	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1035	S	33414	83371	06/25/2010	06/25/2010	06/29/2010	06/29/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1035	S	33414	83371	06/25/2010	06/25/2010	06/29/2010	06/30/2010

Analytical Data Package Information Summary for W.O 10062518

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8260B	Gude-MW6-SO-12 to 14	Initial	10062518-004	1035	S	33414	83371	06/22/2010	06/25/2010	06/29/2010	06/30/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1035	S	33414	83371	06/23/2010	06/25/2010	06/29/2010	06/30/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1035	S	33414	83371	06/23/2010	06/25/2010	06/29/2010	06/30/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1040	S	33431	83437	06/25/2010	06/25/2010	07/01/2010	07/02/2010
	Gude-MW6-SO-12 to 14	Initial	10062518-004	1040	S	33431	83437	06/22/2010	06/25/2010	07/01/2010	07/02/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1040	S	33431	83437	06/23/2010	06/25/2010	07/01/2010	07/02/2010
	Gude-MW8-SO-8 to 10 S	MS	10062518-003 S	1040	S	33431	83437	06/23/2010	06/25/2010	07/01/2010	07/02/2010
	Gude-MW8-SO-8 to 10 SD	MSD	10062518-003 SD	1040	S	33431	83437	06/23/2010	06/25/2010	07/01/2010	07/02/2010
	33431-1-BKS	BKS	33431-1-BKS	1040	S	33431	83453	-----	06/25/2010	07/01/2010	07/01/2010
	33431-1-BLK	BLK	33431-1-BLK	1040	S	33431	83453	-----	06/25/2010	07/01/2010	07/01/2010
SW846 9014	33431-1-BSD	BSD	33431-1-BSD	1040	S	33431	83453	-----	06/25/2010	07/01/2010	07/01/2010
	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1040	S	33431	83453	06/25/2010	06/25/2010	07/01/2010	07/01/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1040	S	33431	83453	06/23/2010	06/25/2010	07/01/2010	07/01/2010
	83466-1-BKS	BKS	83466-1-BKS	1022	S	83466	83466	-----	06/25/2010	07/06/2010	07/06/2010
	83466-1-BLK	BLK	83466-1-BLK	1022	S	83466	83466	-----	06/25/2010	07/06/2010	07/06/2010
	83466-1-BSD	BSD	83466-1-BSD	1022	S	83466	83466	-----	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13A-SO-4 to 6	Initial	10062518-001	1022	S	83466	83466	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13A-SO-4 to 6 S	MS	10062518-001 S	1022	S	83466	83466	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13A-SO-4 to 6 SD	MSD	10062518-001 SD	1022	S	83466	83466	06/25/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW13B-SO-2 to 4	Initial	10062518-005	1022	S	83466	83466	06/25/2010	06/25/2010	07/06/2010	07/06/2010

Analytical Data Package Information Summary for W.O 10062518



Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 9014	Gude-MW6-SO-12 to 14	Initial	10062518-004	1022	S	83466	83466	06/22/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW7-SO-8 to 10	Initial	10062518-002	1022	S	83466	83466	06/23/2010	06/25/2010	07/06/2010	07/06/2010
	Gude-MW8-SO-8 to 10	Initial	10062518-003	1022	S	83466	83466	06/23/2010	06/25/2010	07/06/2010	07/06/2010



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33471-1-BLK
Lab Sample Id: 33471-1-BLK

Matrix: SOLID

Analytical Method: SW846 6020

Prep Method: SW3050B

Date Analyzed: Jul-07-10 13:14

Analyst: 1034

Date Prep: Jul-06-10 16:13

Tech: 1033

Seq Number: 83484

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	U	2.500	1.250	mg/kg	U	1
Arsenic	7440-38-2	U	0.5000	0.2500	mg/kg	U	1
Barium	7440-39-3	U	2.500	1.250	mg/kg	U	1
Beryllium	7440-41-7	U	2.500	1.250	mg/kg	U	1
Cadmium	7440-43-9	U	2.500	1.250	mg/kg	U	1
Chromium	7440-47-3	U	2.500	1.250	mg/kg	U	1
Cobalt	7440-48-4	U	2.500	1.250	mg/kg	U	1
Copper	7440-50-8	U	2.500	1.250	mg/kg	U	1
Lead	7439-92-1	U	2.500	1.250	mg/kg	U	1
Mercury	7439-97-6	U	0.1000	0.0500	mg/kg	U	1
Nickel	7440-02-0	U	2.500	1.250	mg/kg	U	1
Selenium	7782-49-2	U	2.500	1.250	mg/kg	U	1
Silver	7440-22-4	U	2.500	1.250	mg/kg	U	1
Thallium	7440-28-0	U	2.000	1.000	mg/kg	U	1
Tin	7440-31-5	U	5.000	2.500	mg/kg	U	1
Vanadium	7440-62-2	U	2.500	1.250	mg/kg	U	1
Zinc	7440-66-6	U	10.00	5.000	mg/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33471-1-BLK Matrix: SOLID
Lab Sample Id: 33471-1-BLK

Analytical Method: SW846 6020

Prep Method: SW3050B

Date Analyzed: Jul-08-10 12:47

Analyst: 1034

Date Prep: Jul-06-10 16:13

Tech: 1033

Seq Number: 83507

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	2.5	1.3	mg/kg	U	1
Arsenic	7440-38-2	ND	0.5	0.3	mg/kg	U	1
Barium	7440-39-3	ND	2.5	1.3	mg/kg	U	1
Beryllium	7440-41-7	ND	2.5	1.3	mg/kg	U	1
Cadmium	7440-43-9	ND	2.5	1.3	mg/kg	U	1
Chromium	7440-47-3	ND	2.5	1.3	mg/kg	U	1
Cobalt	7440-48-4	ND	2.5	1.3	mg/kg	U	1
Copper	7440-50-8	ND	2.5	1.3	mg/kg	U	1
Lead	7439-92-1	ND	2.5	1.3	mg/kg	U	1
Mercury	7439-97-6	ND	0.10	0.05	mg/kg	U	1
Nickel	7440-02-0	ND	2.5	1.3	mg/kg	U	1
Selenium	7782-49-2	ND	2.5	1.3	mg/kg	U	1
Silver	7440-22-4	ND	2.5	1.3	mg/kg	U	1
Thallium	7440-28-0	ND	2.0	1.0	mg/kg	U	1
Tin	7440-31-5	ND	5.0	2.5	mg/kg	U	1
Vanadium	7440-62-2	ND	2.5	1.3	mg/kg	U	1
Zinc	7440-66-6	ND	10	5.0	mg/kg	U	1

Analytical Method: SW846 6020

Prep Method: SW3050B

Date Analyzed: Jul-09-10 12:09

Analyst: 1034

Date Prep: Jul-06-10 16:13

Tech: 1033

Seq Number: 83537

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	2.5	1.3	mg/kg	U	1
Arsenic	7440-38-2	ND	0.5	0.3	mg/kg	U	1
Barium	7440-39-3	ND	2.5	1.3	mg/kg	U	1
Beryllium	7440-41-7	ND	2.5	1.3	mg/kg	U	1
Cadmium	7440-43-9	ND	2.5	1.3	mg/kg	U	1
Chromium	7440-47-3	ND	2.5	1.3	mg/kg	U	1
Cobalt	7440-48-4	ND	2.5	1.3	mg/kg	U	1
Copper	7440-50-8	ND	2.5	1.3	mg/kg	U	1
Lead	7439-92-1	ND	2.5	1.3	mg/kg	U	1
Mercury	7439-97-6	ND	0.10	0.05	mg/kg	U	1
Nickel	7440-02-0	ND	2.5	1.3	mg/kg	U	1
Selenium	7782-49-2	ND	2.5	1.3	mg/kg	U	1
Silver	7440-22-4	ND	2.5	1.3	mg/kg	U	1
Thallium	7440-28-0	ND	2.0	1.0	mg/kg	U	1
Tin	7440-31-5	ND	5.0	2.5	mg/kg	U	1
Vanadium	7440-62-2	ND	2.5	1.3	mg/kg	U	1
Zinc	7440-66-6	ND	10	5.0	mg/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33506-1-BLK
Lab Sample Id: 33506-1-BLK

Matrix: WATER

Analytical Method: SW846 6020

Prep Method: SW3010A

Date Analyzed: Jul-09-10 12:15

Analyst: 1034

Date Prep: Jul-09-10 08:14

Tech: 1034

Seq Number: 83537

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	10	5.0	ug/l	U	1
Arsenic	7440-38-2	ND	10	5.0	ug/l	U	1
Barium	7440-39-3	90.20	10	5.0	ug/l		1
Beryllium	7440-41-7	ND	10	5.0	ug/l	U	1
Cadmium	7440-43-9	ND	10	5.0	ug/l	U	1
Chromium	7440-47-3	ND	10	5.0	ug/l	U	1
Cobalt	7440-48-4	ND	10	5.0	ug/l	U	1
Copper	7440-50-8	ND	10	5.0	ug/l	U	1
Lead	7439-92-1	ND	10	5.0	ug/l	U	1
Mercury	7439-97-6	ND	2.0	1.0	ug/l	U	1
Nickel	7440-02-0	ND	10	5.0	ug/l	U	1
Selenium	7782-49-2	ND	10	5.0	ug/l	U	1
Silver	7440-22-4	ND	10	5.0	ug/l	U	1
Thallium	7440-28-0	ND	10	5.0	ug/l	U	1
Tin	7440-31-5	ND	50	25	ug/l	U	1
Vanadium	7440-62-2	ND	50	25	ug/l	U	1
Zinc	7440-66-6	215	200	100	ug/l		1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: **83466-1-BLK** Matrix: **SOLID**
Lab Sample Id: **83466-1-BLK**

Analytical Method: **SW846 9014** Prep Method:
Date Analyzed: Jul-06-10 00:00 Analyst: 1022 Date Prep: Tech: 1022
Seq Number: 83466

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Cyanide, Total	57-12-5	ND	2.5	1.3	mg/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33468-1-BLK

Matrix: SOLID

Lab Sample Id: 33468-1-BLK

Analytical Method: SW846 8081B

Prep Method: SW3550

Date Analyzed: Jul-07-10 15:33

Analyst: 1029

Date Prep: Jul-06-10 13:57

Tech: 1016

Seq Number: 83499

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
alpha-BHC	319-84-6	ND	20	9.9	ug/kg	U	1
gamma-BHC (Lindane)	58-89-9	ND	20	9.9	ug/kg	U	1
beta-BHC	319-85-7	ND	20	9.9	ug/kg	U	1
delta-BHC	319-86-8	ND	20	9.9	ug/kg	U	1
Heptachlor	76-44-8	ND	20	9.9	ug/kg	U	1
Aldrin	309-00-2	ND	20	9.9	ug/kg	U	1
Heptachlor epoxide	1024-57-3	ND	20	9.9	ug/kg	U	1
gamma-Chlordane	5103-74-2	ND	20	9.9	ug/kg	U	1
alpha-Chlordane	5103-71-9	ND	20	9.9	ug/kg	U	1
4,4-DDE	72-55-9	ND	20	9.9	ug/kg	U	1
Endosulfan I	959-98-8	ND	20	9.9	ug/kg	U	1
Dieldrin	60-57-1	ND	20	9.9	ug/kg	U	1
Endrin	72-20-8	ND	20	9.9	ug/kg	U	1
4,4-DDD	72-54-8	ND	20	9.9	ug/kg	U	1
Endosulfan II	33213-65-9	ND	20	9.9	ug/kg	U	1
4,4-DDT	50-29-3	ND	20	9.9	ug/kg	U	1
Endrin aldehyde	7421-93-4	ND	20	9.9	ug/kg	U	1
Methoxychlor	72-43-5	ND	20	9.9	ug/kg	U	1
Endosulfan sulfate	1031-07-8	ND	20	9.9	ug/kg	U	1
Endrin ketone	53494-70-5	ND	20	9.9	ug/kg	U	1
Toxaphene	8001-35-2	ND	200	99	ug/kg	U	1
Chlordane	57-74-9	ND	200	99	ug/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33456-1-BLK Matrix: SOLID
Lab Sample Id: 33456-1-BLK

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2,4-D	94-75-7	ND	200	100	ug/kg	U	1
2,4,5-TP (Silvex)	93-72-1	ND	20	10	ug/kg	U	1
2,4,5-T	93-76-5	ND	20	10	ug/kg	U	1
Dinoseb	88-85-7	ND	100	50	ug/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33414-1-BLK
Lab Sample Id: 33414-1-BLK

Matrix: SOLID

Analytical Method: SW846 8260B

Prep Method: SW5030

Date Analyzed: Jun-29-10 21:41

Analyst: 1035

Date Prep: Jun-29-10 19:17

Tech: 1035

Seq Number: 83371

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	ND	5	2.5	ug/kg	U	1
Chloromethane	74-87-3	ND	5	2.5	ug/kg	U	1
Vinyl Chloride	75-01-4	ND	5	2.5	ug/kg	U	1
Bromomethane	74-83-9	ND	5	2.5	ug/kg	U	1
Chloroethane	75-00-3	ND	5	2.5	ug/kg	U	1
Acetone	67-64-1	ND	20	10	ug/kg	U	1
Trichlorofluoromethane	75-69-4	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethene	75-35-4	ND	5	2.5	ug/kg	U	1
Methylene chloride	75-09-2	ND	5	2.5	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	ND	5	2.5	ug/kg	U	1
1,1-Dichloroethane	75-34-3	ND	5	2.5	ug/kg	U	1
Vinyl acetate	108-05-4	ND	5	2.5	ug/kg	U	1
2-Butanone (MEK)	78-93-3	ND	20	10	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	ND	5	2.5	ug/kg	U	1
Bromochloromethane	74-97-5	ND	5	2.5	ug/kg	U	1
Chloroform	67-66-3	ND	5	2.5	ug/kg	U	1
2,2-Dichloropropane	594-20-7	ND	5	2.5	ug/kg	U	1
1,1,1-Trichloroethane	71-55-6	ND	5	2.5	ug/kg	U	1
1,2-Dichloroethane	107-06-2	ND	5	2.5	ug/kg	U	1
1,1-Dichloropropene	563-58-6	ND	5	2.5	ug/kg	U	1
Carbon tetrachloride	56-23-5	ND	5	2.5	ug/kg	U	1
Benzene	71-43-2	ND	5	2.5	ug/kg	U	1
Dibromomethane	74-95-3	ND	5	2.5	ug/kg	U	1
1,2-Dichloropropane	78-87-5	ND	5	2.5	ug/kg	U	1
Carbon Disulfide	75-15-0	ND	10	5.0	ug/kg	U	1
Trichloroethene	79-01-6	ND	5	2.5	ug/kg	U	1
Acrylonitrile	107-13-1	ND	20	10	ug/kg	U	1
Bromodichloromethane	75-27-4	ND	5	2.5	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	5	2.5	ug/kg	U	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ND	20	10	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	ND	5	2.5	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	ND	5	2.5	ug/kg	U	1
Toluene	108-88-3	ND	5	2.5	ug/kg	U	1
1,3-Dichloropropane	142-28-9	ND	5	2.5	ug/kg	U	1
2-Hexanone (MBK)	591-78-6	ND	20	10	ug/kg	U	1
1,2-Dibromoethane	106-93-4	ND	5	2.5	ug/kg	U	1
Dibromochloromethane	124-48-1	ND	5	2.5	ug/kg	U	1
Acrolein	107-02-8	ND	20	10	ug/kg	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	5	2.5	ug/kg	U	1
Bromoform	75-25-2	ND	5	2.5	ug/kg	U	1
trans-1,4-dichloro-2-butene	110-57-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33414-1-BLK	Matrix: SOLID
Lab Sample Id: 33414-1-BLK	

Analytical Method: SW846 8260B		Prep Method: SW5030					
Date Analyzed: Jun-29-10 21:41	Analyst: 1035	Date Prep: Jun-29-10 19:17	Tech: 1035				
	Seq Number: 83371						
Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Tetrachloroethene	127-18-4	ND	5	2.5	ug/kg	U	1
Chlorobenzene	108-90-7	ND	5	2.5	ug/kg	U	1
Ethylbenzene	100-41-4	ND	5	2.5	ug/kg	U	1
m&p-Xylene	108-38-3	ND	10	5.0	ug/kg	U	1
Styrene	100-42-5	ND	5	2.5	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	2.5	ug/kg	U	1
o-Xylene	95-47-6	ND	5	2.5	ug/kg	U	1
1,2,3-Trichloropropane	96-18-4	ND	5	2.5	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	ND	5	2.5	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	ND	5	2.5	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	ND	5	2.5	ug/kg	U	1
1,2-Dibromo-3-chloropropane	96-12-8	ND	40	20	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	5	2.5	ug/kg	U	1
Iodomethane	74-88-4	ND	20	10	ug/kg	U	1
Naphthalene	91-20-3	ND	5	2.5	ug/kg	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	5	2.5	ug/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33431-1-BLK Matrix: SOLID
Lab Sample Id: 33431-1-BLK

Analytical Method: SW846 8270C Prep Method: SW3550
Date Analyzed: Jul-01-10 22:15 Analyst: 1040 Date Prep: Jul-01-10 12:39 Tech: 1022
Seq Number: 83453

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Acenaphthene	83-32-9	ND	170	83	ug/kg	U	1
Acenaphthylene	208-96-8	ND	170	83	ug/kg	U	1
Acetophenone	98-86-2	ND	170	83	ug/kg	U	1
Anthracene	120-12-7	ND	170	83	ug/kg	U	1
Benzo(a)anthracene	56-55-3	ND	170	83	ug/kg	U	1
Benzo(a)pyrene	50-32-8	ND	170	83	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	ND	170	83	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	ND	170	83	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	ND	170	83	ug/kg	U	1
Benzyl butyl phthalate	85-68-7	ND	170	83	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	ND	170	83	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	ND	170	83	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	ND	170	83	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	ND	170	83	ug/kg	U	1
4-Bromophenylphenyl ether	101-55-3	ND	170	83	ug/kg	U	1
Di-n-butyl phthalate	84-74-2	ND	330	170	ug/kg	U	1
4-Chloro-3-methylphenol	59-50-7	ND	170	83	ug/kg	U	1
4-Chloroaniline	106-47-8	ND	330	170	ug/kg	U	1
2-Chloronaphthalene	91-58-7	ND	170	83	ug/kg	U	1
2-Chlorophenol	95-57-8	ND	170	83	ug/kg	U	1
4-Chlorophenyl phenyl ether	7005-72-3	ND	170	83	ug/kg	U	1
Chrysene	218-01-9	ND	170	83	ug/kg	U	1
Dibenz(a,h)anthracene	53-70-3	ND	170	83	ug/kg	U	1
Dibenzofuran	132-64-9	ND	170	83	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	ND	170	83	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	ND	170	83	ug/kg	U	1
Diethyl phthalate	84-66-2	ND	170	83	ug/kg	U	1
Dimethyl phthalate	131-11-3	ND	170	83	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	ND	170	83	ug/kg	U	1
4,6-Dinitro-2-methyl phenol	534-52-1	ND	170	83	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	ND	330	170	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	ND	170	83	ug/kg	U	1
2,6-Dinitrotoluene	606-20-2	ND	170	83	ug/kg	U	1
Fluoranthene	206-44-0	ND	170	83	ug/kg	U	1
Fluorene	86-73-7	ND	170	83	ug/kg	U	1
Hexachlorobenzene	118-74-1	ND	170	83	ug/kg	U	1
Hexachlorobutadiene	87-68-3	ND	170	83	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	ND	170	83	ug/kg	U	1
Hexachloroethane	67-72-1	ND	170	83	ug/kg	U	1
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	170	83	ug/kg	U	1
Isophorone	78-59-1	ND	170	83	ug/kg	U	1



Blank Summary 10062518

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 33431-1-BLK	Matrix: SOLID
Lab Sample Id: 33431-1-BLK	

Analytical Method: SW846 8270C	Prep Method: SW3550		
Date Analyzed: Jul-01-10 22:15	Analyst: 1040	Date Prep: Jul-01-10 12:39	Tech: 1022
Seq Number: 83453			

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2-Methylnaphthalene	91-57-6	ND	170	83	ug/kg	U	1
2-Methylphenol	95-48-7	ND	170	83	ug/kg	U	1
3&4-Methylphenol		ND	170	83	ug/kg	U	1
4-Nitroaniline	100-01-6	ND	170	83	ug/kg	U	1
3-Nitroaniline	99-09-2	ND	170	83	ug/kg	U	1
2-Nitroaniline	88-74-4	ND	330	170	ug/kg	U	1
Nitrobenzene	98-95-3	ND	170	83	ug/kg	U	1
2-Nitrophenol	88-75-5	ND	170	83	ug/kg	U	1
4-Nitrophenol	100-02-7	ND	170	83	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	ND	170	83	ug/kg	U	1
N-Nitrosodi-n-propylamine	621-64-7	ND	170	83	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	ND	170	83	ug/kg	U	1
Di-n-octyl phthalate	117-84-0	ND	170	83	ug/kg	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	170	83	ug/kg	U	1
Pentachlorophenol	87-86-5	ND	330	170	ug/kg	U	1
Phenanthrene	85-01-8	ND	170	83	ug/kg	U	1
Phenol	108-95-2	ND	170	83	ug/kg	U	1
Pyrene	129-00-0	ND	170	83	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	ND	170	83	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	ND	170	83	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	ND	170	83	ug/kg	U	1



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83499

Sample: 10062518-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	22.2	25.00	89	55-143	
Tetrachloro-m-xylene	18.4	25.00	73	32-133	

Lab Batch #: 83499

Sample: 10062518-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	19.9	25.00	80	55-143	
Tetrachloro-m-xylene	16.3	25.00	65	32-133	

Lab Batch #: 83499

Sample: 10062518-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.5	25.00	98	55-143	
Tetrachloro-m-xylene	19.3	25.00	77	32-133	

Lab Batch #: 83499

Sample: 10062518-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.3	25.00	101	55-143	
Tetrachloro-m-xylene	17.1	25.00	68	32-133	

Lab Batch #: 83499

Sample: 10062518-004 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	21.7	25.00	87	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83499

Sample: 10062518-004 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.6	25.00	94	55-143	
Tetrachloro-m-xylene	20.3	25.00	81	32-133	

Lab Batch #: 83499

Sample: 10062518-005 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	19.1	25.00	76	55-143	
Tetrachloro-m-xylene	15.1	25.00	61	32-133	

Lab Batch #: 83499

Sample: 33468-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	20.7	25.00	83	32-133	

Lab Batch #: 83499

Sample: 33468-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	21.7	25.00	87	55-143	
Tetrachloro-m-xylene	19.1	25.00	76	32-133	

Lab Batch #: 83499

Sample: 33468-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	21.6	25.00	86	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/06/2010

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83487

Sample: 10062518-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.8	25.00	103	43-124	
Tetrachloro-m-xylene	17.0	25.00	68	44-97	

Lab Batch #: 83487

Sample: 10062518-004 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.3	25.00	105	43-124	
Tetrachloro-m-xylene	19.9	25.00	79	44-97	

Lab Batch #: 83487

Sample: 10062518-004 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.8	25.00	107	43-124	
Tetrachloro-m-xylene	21.6	25.00	86	44-97	

Lab Batch #: 83487

Sample: 33470-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.5	25.00	94	43-124	
Tetrachloro-m-xylene	20.5	25.00	82	44-97	

Lab Batch #: 83487

Sample: 33470-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	23.1	25.00	92	43-124	
Tetrachloro-m-xylene	19.4	25.00	78	44-97	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/06/2010

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83487

Sample: 33470-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	21.5	25.00	86	43-124	
Tetrachloro-m-xylene	19.4	25.00	78	44-97	

Lab Batch #: 83488

Sample: 10062518-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	0.0	25.00	83	43-124	
Tetrachloro-m-xylene	0.0	25.00	77	44-97	

Lab Batch #: 83488

Sample: 10062518-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	0.0	25.00	71	43-124	
Tetrachloro-m-xylene	0.0	25.00	65	44-97	

Lab Batch #: 83488

Sample: 10062518-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	0.0	25.00	88	43-124	
Tetrachloro-m-xylene	0.0	25.00	77	44-97	

Lab Batch #: 83488

Sample: 10062518-005 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

PCBs Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	0.0	25.00	81	43-124	
Tetrachloro-m-xylene	0.0	25.00	63	44-97	

* Surrogate outside of Laboratory QC limits
Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/06/2010

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83469

Sample: 10062518-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	48.3	50.00	97	40-165	

Lab Batch #: 83469

Sample: 10062518-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	48.2	50.00	96	40-165	

Lab Batch #: 83469

Sample: 10062518-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	50.9	50.00	102	40-165	

Lab Batch #: 83469

Sample: 10062518-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	47.0	50.00	94	40-165	

Lab Batch #: 83469

Sample: 10062518-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	47.4	50.00	95	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/06/2010

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83469

Sample: 10062518-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	48.8	50.00	98	40-165	

Lab Batch #: 83469

Sample: 10062518-005 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	86.1	100	86	40-165	

Lab Batch #: 83469

Sample: 33456-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	43.9	50.00	88	40-165	

Lab Batch #: 83469

Sample: 33456-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	43.8	50.00	88	40-165	

Lab Batch #: 83469

Sample: 33456-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	40.1	50.00	80	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83371

Sample: 10062518-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.8	50.00	104	90-113	
Toluene-D8	50.0	50.00	100	90-108	
4-Bromofluorobenzene	49.4	50.00	99	79-125	

Lab Batch #: 83371

Sample: 10062518-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	53.2	50.00	106	90-113	
Toluene-D8	49.2	50.00	98	90-108	
4-Bromofluorobenzene	48.9	50.00	98	79-125	

Lab Batch #: 83371

Sample: 10062518-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	53.4	50.00	107	90-113	
Toluene-D8	49.6	50.00	99	90-108	
4-Bromofluorobenzene	49.2	50.00	98	79-125	

Lab Batch #: 83371

Sample: 10062518-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	49.3	50.00	99	90-108	
4-Bromofluorobenzene	48.5	50.00	97	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83371

Sample: 10062518-005 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.6	50.00	105	90-113	
Toluene-D8	49.5	50.00	99	90-108	
4-Bromofluorobenzene	49.2	50.00	98	79-125	

Lab Batch #: 83371

Sample: 10062811-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.9	50.00	106	90-113	
Toluene-D8	49.8	50.00	100	90-108	
4-Bromofluorobenzene	49.9	50.00	100	79-125	

Lab Batch #: 83371

Sample: 10062811-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	49.6	50.00	99	90-108	
4-Bromofluorobenzene	49.8	50.00	100	79-125	

Lab Batch #: 83371

Sample: 33414-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.0	50.00	102	90-113	
Toluene-D8	49.6	50.00	99	90-108	
4-Bromofluorobenzene	49.8	50.00	100	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83371

Sample: 33414-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.1	50.00	100	90-113	
Toluene-D8	49.2	50.00	98	90-108	
4-Bromofluorobenzene	50.2	50.00	100	79-125	

Lab Batch #: 83371

Sample: 33414-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.0	50.00	102	90-113	
Toluene-D8	49.4	50.00	99	90-108	
4-Bromofluorobenzene	51.0	50.00	102	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83437

Sample: 10062518-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organics Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2720	3330	82	48-112	
2-Fluorophenol	3510	6650	53	45-107	
Nitrobenzene-d5	2850	3330	86	44-98	
Phenol-d6	5160	6650	78	38-100	
Terphenyl-D14	3450	3330	104	34-165	
2,4,6-Tribromophenol	5320	6650	80	44-104	

Lab Batch #: 83437

Sample: 10062518-003 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organics Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2770	3320	83	48-112	
2-Fluorophenol	5660	6650	85	45-107	
Nitrobenzene-d5	2900	3320	87	44-98	
Phenol-d6	5350	6650	81	38-100	
Terphenyl-D14	3510	3320	106	34-165	
2,4,6-Tribromophenol	5470	6650	82	44-104	

Lab Batch #: 83437

Sample: 10062518-003 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organics Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2800	3330	84	48-112	
2-Fluorophenol	5640	6660	85	45-107	
Nitrobenzene-d5	2890	3330	87	44-98	
Phenol-d6	5320	6660	80	38-100	
Terphenyl-D14	3370	3330	101	34-165	
2,4,6-Tribromophenol	5350	6660	80	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83437

Sample: 10062518-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organics Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2980	3320	90	48-112	
2-Fluorophenol	3870	6650	58	45-107	
Nitrobenzene-d5	3090	3320	93	44-98	
Phenol-d6	5560	6650	84	38-100	
Terphenyl-D14	3690	3320	111	34-165	
2,4,6-Tribromophenol	5720	6650	86	44-104	

Lab Batch #: 83437

Sample: 10062518-005 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organics Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2920	3330	88	48-112	
2-Fluorophenol	3810	6650	57	45-107	
Nitrobenzene-d5	3080	3330	93	44-98	
Phenol-d6	5720	6650	86	38-100	
Terphenyl-D14	3900	3330	117	34-165	
2,4,6-Tribromophenol	5580	6650	84	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83453

Sample: 10062518-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2880	3320	87	48-112	
2-Fluorophenol	6000	6630	90	45-107	
Nitrobenzene-d5	3080	3320	93	44-98	
Phenol-d6	5930	6630	89	38-100	
Terphenyl-D14	3210	3320	97	34-165	
2,4,6-Tribromophenol	6270	6630	95	44-104	

Lab Batch #: 83453

Sample: 10062518-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2840	3320	86	48-112	
2-Fluorophenol	5980	6650	90	45-107	
Nitrobenzene-d5	3020	3320	91	44-98	
Phenol-d6	5910	6650	89	38-100	
Terphenyl-D14	3310	3320	99	34-165	
2,4,6-Tribromophenol	5980	6650	90	44-104	

Lab Batch #: 83453

Sample: 33431-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3080	3330	93	48-112	
2-Fluorophenol	6510	6660	98	45-107	
Nitrobenzene-d5	3280	3330	99	44-98	**
Phenol-d6	6150	6660	92	38-100	
Terphenyl-D14	3630	3330	109	34-165	
2,4,6-Tribromophenol	6300	6660	95	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Lab Batch #: 83453

Sample: 33431-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2940	3330	88	48-112	
2-Fluorophenol	6530	6660	98	45-107	
Nitrobenzene-d5	3270	3330	98	44-98	
Phenol-d6	6080	6660	91	38-100	
Terphenyl-D14	3280	3330	98	34-165	
2,4,6-Tribromophenol	5980	6660	90	44-104	

Lab Batch #: 83453

Sample: 33431-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2970	3320	89	48-112	
2-Fluorophenol	6570	6650	99	45-107	
Nitrobenzene-d5	3230	3320	97	44-98	
Phenol-d6	6050	6650	91	38-100	
Terphenyl-D14	3440	3320	104	34-165	
2,4,6-Tribromophenol	6210	6650	94	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Prep Batch #: 33471

Date Prepared: 07/06/2010

Sample ID: 33471-1-BKS

Matrix: Solid

Lab Batch ID 83507

Date Analyzed: 07/08/2010

Analyst: 1034

Reporting Units: mg/kg

BLANK/BLANK SPIKE RECOVERY STUDY

Quote Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1 250	20 00	20 84	104	75-125	
Arsenic	<0 2500	20 00	20 79	104	75-125	
Barium	<1 250	20 00	21 37	107	75-125	
Beryllium	<1 250	20 00	17 09	85	75-125	
Cadmium	<1 250	20 00	20 69	103	75-125	
Chromium	<1 250	20 00	21 20	106	75-125	
Cobalt	<1 250	20 00	21 71	109	75-125	
Copper	<1 250	20 00	21 54	108	75-125	
Lead	<1 250	20 00	21 04	105	75-125	
Mercury	<0 0500	0 5000	0 5250	105	75-125	
Nickel	<1 250	20 00	20 36	102	75-125	
Selenium	<1 250	20 00	19 52	98	75-125	
Silver	<1 250	20 00	20 46	102	75-125	
Thallium	<1 000	20 00	20 68	103	75-125	
Tin	<2 500	20 00	20 59	103	75-125	
Vanadium	<1 250	20 00	20 93	105	75-125	
Zinc	<5 000	20 00	21 13	106	75-125	

Blank Spike Recovery [D] = $100 * (([C] - [A]) / [B])$

H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits

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Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A

Prep Batch #: 33471

Date Prepared: 07/06/2010

Sample ID: 33471-1-BKS

Matrix: Solid

Lab Batch ID 83537

Date Analyzed: 07/09/2010

Analyst: 1034

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Quote Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1.250	20.00	20.63	103	75-125	
Arsenic	<0.2500	20.00	20.38	102	75-125	
Barium	<1.250	20.00	20.54	103	75-125	
Beryllium	<1.250	20.00	19.14	96	75-125	
Cadmium	<1.250	20.00	20.28	101	75-125	
Chromium	<1.250	20.00	20.37	102	75-125	
Cobalt	<1.250	20.00	21.59	108	75-125	
Copper	<1.250	20.00	20.88	104	75-125	
Lead	<1.250	20.00	20.71	104	75-125	
Mercury	<0.0500	0.5000	0.5200	104	75-125	
Nickel	<1.250	20.00	8.290	41	75-125	I
Selenium	<1.250	20.00	18.86	94	75-125	
Silver	<1.250	20.00	20.42	102	75-125	
Thallium	<1.000	20.00	20.40	102	75-125	
Tin	<2.500	20.00	20.57	103	75-125	
Vanadium	<1.250	20.00	20.28	101	75-125	
Zinc	<5.000	20.00	19.00	95	75-125	

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Blank Spike Recovery [D] = 100*(([C]-[A])/[B])

H= Recovery of BS,BSD or both exceeded the laboratory control limits

F = RPD exceeded the laboratory control limits

I = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83499

Units: ug/kg

Date Prepared: 07/06/2010

Date Analyzed: 07/07/2010

Sample: 33468-1-BKS

Method: SW3550 / SW8081B

Project ID: N/A

Analyst: I029

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag		
<9.872	19.70	18.25	93	19.70	18.78	95	2	80-126	25			
<9.872	19.70	18.37	93	19.70	18.85	95	2	81-124	25			
<9.872	19.70	17.67	90	19.70	18.07	91	1	77-121	25			
<9.872	19.70	19.67	100	19.70	19.99	101	1	75-126	25			
<9.872	19.70	17.77	90	19.70	18.16	92	2	76-120	25			
<9.872	19.70	18.62	95	19.70	18.98	96	1	81-122	25			
<9.872	19.70	18.64	95	19.70	18.90	95	0	81-123	25			
<9.872	19.70	19.90	101	19.70	20.09	101	0	89-135	25			
<9.872	19.70	20.29	103	19.70	20.47	103	0	82-121	25			
<9.872	19.70	19.86	101	19.70	20.12	102	1	78-138	25			
<9.872	19.70	19.63	100	19.70	19.83	100	0	82-123	25			
<9.872	19.70	20.69	105	19.70	20.81	105	0	81-126	25			
<9.872	19.70	20.02	102	19.70	20.08	101	1	70-131	25			
<9.872	19.70	19.91	101	19.70	20.12	102	1	68-143	25			
<9.872	19.70	20.48	104	19.70	20.60	104	0	80-133	25			
<9.872	19.70	19.93	101	19.70	20.53	104	3	68-129	25			
<9.872	19.70	22.73	115	19.70	22.71	115	0	77-127	25			
<9.872	19.70	17.31	88	19.70	17.75	90	2	67-121	25			
<9.872	19.70	21.10	107	19.70	20.89	105	2	79-126	25			
<9.872	19.70	21.27	108	19.70	21.48	108	0	82-137	25			

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Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/(B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/(E)$

H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83487

Units: mg/kg

Date Prepared: 07/06/2010

Date Analyzed: 07/07/2010

Sample: 33470-1-BKS

Method: SW3550 / SW8082

Project ID: N/A

Analyst: 1029

Matrix: Solid

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Analytes	PCBs	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
PCB-1016		<0.0494	0.4955	0.4182	84	0.4955	0.4214	85	1	59-123	25	
PCB-1260		<0.0494	0.4955	0.4882	99	0.4955	0.4826	98	1	54-152	25	

Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83469

Units: ug/kg

Date Prepared: 07/06/2010

Date Analyzed: 07/06/2010

Sample: 33456-1-BKS

Method: SW8151A_PREP / SW8151

Project ID: N/A

Analyst: 1029

Matrix: Solid

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<99.70	995	759.7	76	995	766.6	78	3	65-110	30	
2,4,5-TP (Silvex)	<9.970	99.50	76.52	77	99.50	78.23	79	3	58-130	30	
2,4,5-T	<9.970	99.50	100.3	101	99.50	94.78	96	5	81-130	30	
Dinoseb	<49.85	497.5	363.4	73	497.5	372.9	76	4	62-102	30	

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Relative Percent Difference $RPD = 200 * [(D-F)/(D+F)]$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/[E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83371

Units: ug/kg

Date Prepared: 06/29/2010
Date Analyzed: 06/29/2010

Sample: 33414-I-BKS
Method: SW5030 / SW8260B

Project ID: N/A
Analyst: 1035
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Volatile Organic Compounds By Gas Chromatograph/Mass Spectrometry (GC/MS): Capillary Column Techniw	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Dichlorodifluoromethane	<2.500	60.00	59.62	99	60.00	51.96	87	13	55-125	25	
Chloromethane	<2.500	60.00	55.97	93	60.00	49.33	82	13	62-125	25	
Vinyl Chloride	<2.500	60.00	54.50	91	60.00	47.65	79	14	65-130	25	
Bromomethane	<2.500	60.00	55.96	93	60.00	48.90	82	13	59-131	25	
Chloroethane	<2.500	60.00	58.68	98	60.00	51.84	86	13	57-135	25	
Acetone	<10.00	60.00	56.04	93	60.00	52.73	88	6	7-180	25	
Trichlorofluoromethane	<2.500	60.00	57.79	96	60.00	53.49	89	8	55-133	25	
1,1-Dichloroethene	<2.500	60.00	64.93	108	60.00	57.41	96	12	60-122	25	
Methylene chloride	<2.500	60.00	56.91	95	60.00	11.77	20	130	63-125	25	LF
trans-1,2-Dichloroethene	<2.500	60.00	63.37	106	60.00	55.94	93	13	62-129	25	
1,1-Dichloroethane	<2.500	60.00	58.46	97	60.00	49.83	83	16	55-135	25	
Vinyl acetate	<2.500	60.00	57.41	96	60.00	50.10	84	13	57-136	25	
2-Butanone (MEK)	<10.00	60.00	59.19	99	60.00	56.26	94	5	36-201	25	
cis-1,2-Dichloroethene	<2.500	60.00	59.41	99	60.00	51.95	87	13	60-127	25	
Bromochloromethane	<2.500	60.00	60.81	101	60.00	52.92	88	14	66-127	25	
Chloroform	<2.500	60.00	59.32	99	60.00	52.28	87	13	64-113	25	
2,2-Dichloropropane	<2.500	60.00	60.62	101	60.00	52.60	88	14	53-129	25	
1,1,1-Trichloroethane	<2.500	60.00	59.95	100	60.00	52.08	87	14	57-127	25	
1,2-Dichloroethane	<2.500	60.00	57.70	96	60.00	52.08	87	10	62-124	25	
1,1-Dichloropropene	<2.500	60.00	58.95	98	60.00	51.49	86	13	61-122	25	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83371

Units: ug/kg

Date Prepared: 06/29/2010

Date Analyzed: 06/29/2010

Sample: 33414-1-BKS

Project ID: N/A

Analyst: 1035

Matrix: Solid

Volatile Organic Compounds By Gas Chromatograph/Mass Spectrometry (GC/MS): Capillary Column Techniw	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon tetrachloride	<2.500	60.00	58.80	98	60.00	51.62	86	13	55-131	25	
Benzene	<2.500	60.00	59.24	99	60.00	51.61	86	14	64-114	25	
Dibromomethane	<2.500	60.00	59.47	99	60.00	51.97	87	13	64-132	25	
1,2-Dichloropropane	<2.500	60.00	59.02	98	60.00	51.64	86	13	61-117	25	
Carbon Disulfide	<5.000	60.00	58.78	98	60.00	51.28	85	14	37-161	25	
Trichloroethene	<2.500	60.00	59.42	99	60.00	51.40	86	14	62-121	25	
Acrylonitrile	<10.00	60.00	59.34	99	60.00	53.90	90	10	59-168	25	
Bromodichloromethane	<2.500	60.00	59.97	100	60.00	51.88	86	15	62-126	25	
cis-1,3-Dichloropropene	<2.500	60.00	61.06	102	60.00	52.96	88	15	59-119	25	
4-Methyl-2-Pentanone (MIBK)	<10.00	60.00	61.39	102	60.00	55.52	93	9	59-148	25	
trans-1,3-Dichloropropene	<2.500	60.00	61.08	102	60.00	53.10	89	14	51-126	25	
1,1,2-Trichloroethane	<2.500	60.00	59.85	100	60.00	52.77	88	13	60-134	25	
Toluene	<2.500	60.00	58.21	97	60.00	50.92	85	13	64-117	25	
1,3-Dichloropropane	<2.500	60.00	60.12	100	60.00	52.57	88	13	61-129	25	
2-Hexanone (MBK)	<10.00	60.00	58.47	97	60.00	54.54	91	6	9-176	25	
1,2-Dibromoethane	<2.500	60.00	60.43	101	60.00	53.61	89	13	65-135	25	
Dibromochloromethane	<2.500	60.00	60.18	100	60.00	52.81	88	13	67-126	25	
Acrolein	<10.00	60.00	53.58	89	60.00	61.27	102	14	52-168	25	
1,1,1,2-Tetrachloroethane	<2.500	60.00	59.80	100	60.00	52.02	87	14	64-121	25	
Bromoform	<2.500	60.00	60.58	101	60.00	53.36	89	13	62-120	25	

Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
 F = RPD exceeded the laboratory control limits
 L = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83371

Units: ug/kg

Date Prepared: 06/29/2010

Date Analyzed: 06/29/2010

Sample: 33414-1-BKS

Project ID: N/A

Analyst: 1035

Matrix: Solid

Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
<2.500	60.00	61.06	102	60.00	54.24	90	13	43-133	25	
<2.500	60.00	59.01	98	60.00	51.09	85	14	58-129	25	
<2.500	60.00	58.91	98	60.00	51.25	85	14	64-116	25	
<2.500	60.00	59.72	100	60.00	52.04	87	14	61-118	25	
<5.000	120	120.1	100	120	105.5	88	13	63-116	25	
<2.500	60.00	60.93	102	60.00	52.52	88	15	60-112	25	
<2.500	60.00	59.09	98	60.00	53.78	90	9	58-144	25	
<2.500	60.00	60.35	101	60.00	52.03	87	15	65-117	25	
<2.500	60.00	58.22	97	60.00	52.47	87	11	59-139	25	
<2.500	60.00	59.09	98	60.00	51.45	86	13	58-123	25	
<2.500	60.00	58.68	98	60.00	51.22	85	14	58-121	25	
<2.500	60.00	60.25	100	60.00	52.32	87	14	59-124	25	
<20.00	60.00	59.53	99	60.00	57.02	95	4	57-144	25	
<2.500	60.00	61.85	103	60.00	53.23	89	15	46-122	25	
<10.00	60.00	63.26	105	60.00	56.72	95	10	46-137	25	
<2.500	60.00	62.86	105	60.00	56.23	94	11	54-164	25	
<2.500	60.00	61.54	103	60.00	53.15	89	15	48-126	25	

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Relative Percent Difference $RPD = 200 * |(D-F)/(D+F)|$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/[E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83453

Date Prepared: 07/01/2010

Date Analyzed: 07/01/2010

Units: ug/kg

Project ID: N/A

Analyst: 1040

Matrix: Solid

Sample: 33431-1-BKS

Method: SW3550 / SW8270C

c/MS For Semivolatile Organics (Capillary Column Technique) Analytes	BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<83.31	1331	1380	104	1331	1418	107	3	63-120	30	
Acenaphthylene	<83.31	1331	1384	104	1331	1431	108	4	59-125	30	
Acetophenone	<83.31	1331	1414	106	1331	1472	111	5	57-122	30	
Anthracene	<83.31	1331	1333	100	1331	1410	106	6	63-121	30	
Benzo(a)anthracene	<83.31	1331	1404	105	1331	1468	110	5	61-130	30	
Benzo(a)pyrene	<83.31	1331	1518	114	1331	1589	120	5	58-141	30	
Benzo(b)fluoranthene	<83.31	1331	1567	118	1331	1564	118	0	59-140	30	
Benzo(g,h,i)perylene	<83.31	1331	1340	101	1331	1485	112	10	32-158	30	
Benzo(k)fluoranthene	<83.31	1331	1467	110	1331	1551	117	6	55-137	30	
Benzyl butyl phthalate	<83.31	1331	1582	119	1331	1691	127	7	57-132	30	
bis(2-chloroethoxy) methane	<83.31	1331	1363	102	1331	1435	108	6	61-123	30	
bis(2-chloroethyl) ether	<83.31	1331	1414	106	1331	1479	111	5	55-127	30	
bis(2-chloroisopropyl) ether	<83.31	1331	1310	98	1331	1362	102	4	42-128	30	
bis(2-ethylhexyl) phthalate	<83.31	1331	1501	113	1331	1649	124	9	52-142	30	
4-Bromophenylphenyl ether	<83.31	1331	1366	103	1331	1433	108	5	66-138	30	
Di-n-butyl phthalate	<166.6	1331	1321	99	1331	1454	109	10	54-126	30	
4-Chloro-3-methylphenol	<83.31	1331	1450	109	1331	1508	113	4	63-125	30	
4-Chloroaniline	<166.6	1331	1397	105	1331	1446	109	4	64-118	30	
2-Chloronaphthalene	<83.31	1331	1311	98	1331	1371	103	5	62-117	30	
2-Chlorophenol	<83.31	1331	1422	107	1331	1483	112	5	57-128	30	

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Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
= RPD exceeded the laboratory control limits
= Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83453

Units: ug/kg

Sample: 33431-1-BKS

Date Prepared: 07/01/2010

Date Analyzed: 07/01/2010

Project ID: N/A

Analyst: 1040

Matrix: Solid

c/MS For Semivolatile Organics (Capillary Column Technique)	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
4-Chlorophenyl phenyl ether	<83.31	1331	1348	101	1331	1405	106	5	65-129	30	
Chrysene	<83.31	1331	1374	103	1331	1450	109	6	62-127	30	
Dibenz(a,h)anthracene	<83.31	1331	1441	108	1331	1605	121	11	43-148	30	
Dibenzofuran	<83.31	1331	1365	103	1331	1414	106	3	63-120	30	
3,3-Dichlorobenzidine	<83.31	1331	1028	77	1331	1163	88	13	32-138	30	
2,4-Dichlorophenol	<83.31	1331	1424	107	1331	1502	113	5	65-127	30	
Diethyl phthalate	<83.31	1331	1389	104	1331	1445	109	5	58-124	30	
Dimethyl phthalate	<83.31	1331	1380	104	1331	1436	108	4	55-125	30	
2,4-Dimethylphenol	<83.31	1331	1393	105	1331	1466	110	5	65-124	30	
4,6-Dinitro-2-methyl phenol	<83.31	1331	1558	117	1331	1596	120	3	26-167	30	
2,4-Dinitrophenol	<166.6	1331	1657	124	1331	1570	118	5	18-177	30	
2,4-Dinitrotoluene	<83.31	1331	1464	110	1331	1476	111	1	60-134	30	
2,6-Dinitrotoluene	<83.31	1331	1451	109	1331	1492	112	3	63-136	30	
Fluoranthene	<83.31	1331	1307	98	1331	1384	104	6	54-127	30	
Fluorene	<83.31	1331	1352	102	1331	1408	106	4	64-119	30	
Hexachlorobenzene	<83.31	1331	1326	100	1331	1426	107	7	58-124	30	
Hexachlorobutadiene	<83.31	1331	1363	102	1331	1435	108	6	64-128	30	
Hexachlorocyclopentadiene	<83.31	1331	1379	104	1331	1345	101	3	26-152	30	
Hexachloroethane	<83.31	1331	1374	103	1331	1464	110	7	55-125	30	
Indeno(1,2,3-c,d)pyrene	<83.31	1331	1503	113	1331	1648	124	9	38-150	30	

Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83453

Units: ug/kg

Sample: 33431-1-BKS

Date Prepared: 07/01/2010

Date Analyzed: 07/01/2010

Project ID: N/A
Analyst: 1040
Matrix: Solid

c/MS For Semivolatile Organics (Capillary Column Technique)	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Isophorone	<83.31	1331	1381	104	1331	1431	108	4	56-120	30	
2-Methylnaphthalene	<83.31	1331	1339	101	1331	1399	105	4	63-120	30	
2-Methylphenol	<83.31	1331	1415	106	1331	1477	111	5	57-121	30	
3&4-Methylphenol	<83.31	1331	1377	103	1331	1421	107	4	49-123	30	
4-Nitroaniline	<83.31	1331	1378	104	1331	1366	103	1	53-128	30	
3-Nitroaniline	<83.31	1331	1508	113	1331	1551	117	3	53-132	30	
2-Nitroaniline	<166.6	1331	1544	116	1331	1566	118	2	54-131	30	
Nitrobenzene	<83.31	1331	1378	104	1331	1470	111	7	53-119	30	
2-Nitrophenol	<83.31	1331	1572	118	1331	1643	124	5	65-137	30	
4-Nitrophenol	<83.31	1331	1431	108	1331	1399	105	3	50-123	30	
N-Nitrosodimethylamine	<83.31	1331	1360	102	1331	1423	107	5	62-123	30	
N-Nitrosodi-n-propylamine	<83.31	1331	1353	102	1331	1408	106	4	46-121	30	
N-Nitrosodiphenylamine	<83.31	1331	1307	98	1331	1396	105	7	56-129	30	
Di-n-octyl phthalate	<83.31	1331	1608	121	1331	1580	119	2	38-144	30	
1,2,4,5-Tetrachlorobenzene	<83.31	1331	1369	103	1331	1422	107	4	64-127	30	
Pentachlorophenol	<166.6	1331	1353	102	1331	1377	104	2	46-134	30	
Phenanthrene	<83.31	1331	1299	98	1331	1386	104	6	61-119	30	
Phenol	<83.31	1331	1286	97	1331	1367	103	6	47-108	30	
Pyrene	<83.31	1331	1564	118	1331	1599	120	2	54-141	30	
2,3,4,6-Tetrachlorophenol	<83.31	1331	1482	111	1331	1501	113	2	56-130	30	

Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

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= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83453

Units: ug/kg

Date Prepared: 07/01/2010

Date Analyzed: 07/01/2010

Sample: 33431-1-BKS

Project ID: N/A

Analyst: 1040

Matrix: Solid

c/MS For Semivolatile Organics (Capillary Column Technique)		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4,6-Trichlorophenol		<83.31	1331	1454	109	1331	1478	111	2	67-127	30	
2,4,5-Trichlorophenol		<83.31	1331	1485	112	1331	1510	114	2	69-132	30	

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Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$
 Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

= Recovery of BS, BSD or both exceeded the laboratory control limits
 = RPD exceeded the laboratory control limits
 = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 1

Lab Batch ID: 83466

Units: mg/kg

Sample: 83466-1-BKS

Method: / SW9014

Project ID: N/A

Analyst: 1022

Matrix: Solid

Date Prepared: 07/06/2010
Date Analyzed: 07/06/2010

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Cyanide Method (Colorimetric, Manual)	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	<1.250	5.000	4.910	98	5.000	4.910	98	0	80-120	20	
Cyanide, Total											

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 33471

Lab Batch ID: 83484

Reporting Units: mg/kg

Date Prepared: 07/06/2010

Date Analyzed: 07/07/2010

Client Sample Id: S-1 S

Sample ID: 10070610-001 S

Method: SW3050B/SW6020

Project ID: N/A

Analyst: 1034

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Total Metals Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Antimony	<0.0025	20.56	9.108	44	20.39	11.39	56	24	75-125	30
Arsenic	3.820	20.56	23.49	96	20.39	22.96	94	2	75-125	30	
Barium	98.22	20.56	114.7	80	20.39	114.2	78	3	75-125	30	
Beryllium	0.0031	20.56	21.27	103	20.39	19.82	97	6	75-125	30	
Cadmium	<1.370	20.56	21.47	104	20.39	20.41	100	4	75-125	30	
Chromium	44.17	20.56	65.59	104	20.39	70.81	131	23	75-125	30	X
Cobalt	0.0578	20.56	49.55	241	20.39	49.05	240	0	75-125	30	X
Copper	0.0868	20.56	70.11	341	20.39	69.33	340	0	75-125	30	X
Lead	13.10	20.56	34.65	105	20.39	32.87	97	8	75-125	30	
Mercury	<0.0548	0.5140	0.5551	108	0.5098	0.5659	111	3	75-125	30	
Nickel	0.0663	20.56	58.34	283	20.39	55.31	271	4	75-125	30	X
Selenium	<1.370	20.56	19.13	93	20.39	19.14	94	1	75-125	30	
Silver	<1.370	20.56	20.90	102	20.39	20.17	99	3	75-125	30	
Thallium	<0.0020	20.56	21.90	107	20.39	21.08	103	4	75-125	30	
Tin	<0.0050	20.56	22.44	109	20.39	21.58	106	3	75-125	30	
Vanadium	0.1129	20.56	88.20	428	20.39	85.54	419	2	75-125	30	X
Zinc	0.1520	20.56	106.2	516	20.39	100.1	490	5	75-125	30	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 33468

Lab Batch ID: 83499

Reporting Units: ug/kg

Date Prepared: 07/06/2010
Date Analyzed: 07/07/2010

Client Sample Id: Gude-MW6-SO-12 to 14 S
Sample ID: 10062518-004 S
Method: SW3550 / SW8081B

Project ID: N/A
Analyst: 1029
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Organochlorine Pesticides And Pcbs As Aroclors By Gas Chromatography Capillary Column Technique	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<12.23	24.56	22.69	92	24.41	20.51	84	9	70-130	30	
gamma-BHC (Lindane)	<12.23	24.56	22.63	92	24.41	20.56	84	9	72-128	30	
beta-BHC	<12.23	24.56	21.87	89	24.41	20.19	83	7	74-121	30	
delta-BHC	<12.23	24.56	23.97	98	24.41	21.72	89	10	72-127	30	
Heptachlor	<12.23	24.56	21.89	89	24.41	19.78	81	9	66-127	30	
Aldrin	<12.23	24.56	22.75	93	24.41	20.72	85	9	71-130	30	
Heptachlor epoxide	<12.23	24.56	22.69	92	24.41	20.79	85	8	73-128	30	
gamma-Chlordane	<12.23	24.56	24.18	98	24.41	22.05	90	9	73-153	30	
alpha-Chlordane	<12.23	24.56	24.64	100	24.41	22.46	92	8	62-144	30	
4,4-DDE	<12.23	24.56	24.23	99	24.41	22.12	91	8	78-143	30	
Endosulfan I	<12.23	24.56	23.86	97	24.41	21.81	89	9	73-129	30	
Dieldrin	<12.23	24.56	25.21	103	24.41	22.99	94	9	72-136	30	
Endrin	<12.23	24.56	25.06	102	24.41	23.01	94	8	82-131	30	
4,4-DDD	<12.23	24.56	24.15	98	24.41	21.86	90	9	70-143	30	
Endosulfan II	<12.23	24.56	24.84	101	24.41	22.81	93	8	75-136	30	
4,4-DDT	<12.23	24.56	25.18	103	24.41	22.92	94	9	78-125	30	
Endrin aldehyde	<12.23	24.56	28.72	117	24.41	25.81	106	10	78-130	30	
Methoxychlor	<12.23	24.56	22.10	90	24.41	20.09	82	9	71-122	30	
Endosulfan sulfate	<12.23	24.56	25.82	105	24.41	23.89	98	7	77-129	30	
Endrin ketone	<12.23	24.56	25.81	105	24.41	23.43	96	9	75-145	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Date Prepared: 07/06/2010 Client Sample Id: Gude-MW6-SO-12 to 14 S Project ID: N/A
 Date Analyzed: 07/07/2010 Sample ID: 10062518-004 S Analyst: 1029
 Reporting Units: mg/kg Method: SW3550 /SW8082 Matrix: Soil

PCBs Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											Control Limits %RPD	Control Limits %R	RPD %	Spiked Dup. %R G	Duplicate Spiked Sample Result F	Spiked Sample %R D	Spike Added E	Spiked Sample Result C	Parent Sample Result A	Spike Added B
	Parent Sample Result A	Spike Added B	Spiked Sample Result C	Spiked Sample %R D	Spike Added E	Duplicate Spiked Sample Result F	Spiked Dup. %R G	RPD %	Control Limits %R	Control Limits %RPD	Flag										
PCB-1016	<0.0612	0.6121	0.5009	82	0.6115	0.4907	80	2	52-122	30											
PCB-1260	<0.0612	0.6121	0.6346	104	0.6115	0.6020	98	6	52-184	30											

Matrix Spike Percent Recovery |D| = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery |G| = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Client Sample Id: Gude-MW13A-SO-4 to 6 S
 Sample ID: 10062518-001 S
 Method: SW8151A_PREP/SW8151A
 Project ID: N/A
 Analyst: 1029
 Matrix: Soil

Date Prepared: 07/06/2010
 Date Analyzed: 07/06/2010

Prep Batch #: 33456
 Lab Batch ID: 83469
 Reporting Units: ug/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	2,4-D	<120.6	1142	840.6	74	1175	839.3	71	4	57-117	30
2,4,5-TP (Silvex)	<12.06	114.2	85.87	75	117.5	90.70	77	3	59-126	30	
2,4,5-T	<12.06	114.2	100.6	88	117.5	106.6	91	3	66-144	30	
Dinoseb	<60.31	570.9	406.2	71	587.4	430.5	73	3	63-106	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 33414

Lab Batch ID: 83371

Reporting Units: ug/kg

Date Prepared: 06/29/2010
Date Analyzed: 06/30/2010

Client Sample Id: Area 2 Trash 1-001 S
Sample ID: 10062811-001 S
Method: SW5030/SW8260B

Project ID: N/A
Analyst: 1035
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Volatile Organic Compounds By Gas Chromatograph/Mass Spectrometry (GC/MS): Capillary Column Techniw	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Dichlorodifluoromethane	<3.031	71.74	50.71	71	72.16	57.39	80	12	26-140	25	
Chloromethane	<3.031	71.74	39.55	55	72.16	47.46	66	18	42-126	25	
Vinyl Chloride	<3.031	71.74	40.03	56	72.16	46.04	64	13	34-137	25	
Bromomethane	<3.031	71.74	34.77	48	72.16	43.21	60	22	35-132	25	
Chloroethane	<3.031	71.74	48.36	67	72.16	53.96	75	11	33-133	25	
Acetone	<12.12	71.74	30.61	43	72.16	43.52	60	33	27-177	25	F
Trichlorofluoromethane	<3.031	71.74	49.08	68	72.16	56.92	79	15	36-136	25	
1,1-Dichloroethene	<3.031	71.74	51.05	71	72.16	57.64	80	12	38-124	25	
Methylene chloride	<3.031	71.74	43.93	61	72.16	49.83	69	12	35-129	25	
trans-1,2-Dichloroethene	<3.031	71.74	39.65	55	72.16	44.99	62	12	33-135	25	
1,1-Dichloroethane	<3.031	71.74	47.96	67	72.16	53.34	74	10	45-125	25	
Vinyl acetate	<3.031	71.74	24.14	34	72.16	27.12	38	11	4-128	25	
2-Butanone (MEK)	<12.12	71.74	34.10	48	72.16	45.65	63	27	17-152	25	F
cis-1,2-Dichloroethene	<3.031	71.74	43.62	61	72.16	48.52	67	9	45-122	25	
Bromochloromethane	<3.031	71.74	46.02	64	72.16	51.65	72	12	42-127	25	
Chloroform	<3.031	71.74	48.30	67	72.16	53.80	75	11	44-119	25	
2,2-Dichloropropane	<3.031	71.74	46.10	64	72.16	51.41	71	10	34-126	25	
1,1,1-Trichloroethane	<3.031	71.74	47.58	66	72.16	52.87	73	10	40-132	25	
1,2-Dichloroethane	<3.031	71.74	47.35	66	72.16	53.34	74	11	30-132	25	
1,1-Dichloropropene	<3.031	71.74	39.59	55	72.16	44.54	62	12	29-132	25	
Carbon tetrachloride	<3.031	71.74	43.99	61	72.16	48.52	67	9	30-138	25	
Benzene	<3.031	71.74	46.20	64	72.16	50.80	70	9	35-126	25	
Dibromomethane	<3.031	71.74	43.03	60	72.16	48.84	68	13	37-129	25	
1,2-Dichloropropane	<3.031	71.74	49.34	69	72.16	54.66	76	10	41-117	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Date Prepared: 06/29/2010
Date Analyzed: 06/30/2010

Client Sample Id:
Sample ID: 10062811-001 S
Method: SW5030/SW8260B

Project ID: N/A
Analyst: 1035
Matrix: Soil

Prep Batch #: 83371
Lab Batch ID: 83371
Reporting Units: ug/kg

Volatile Organic Compounds By Gas Chromatograph/Mass Spectrometry (GC/MS): Capillary Column Techniw	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon Disulfide	<6.061	71.74	24.98	35	72.16	24.07	33	6	11-147	25	
Trichloroethene	<3.031	71.74	38.13	53	72.16	42.42	59	11	33-132	25	
Acrylonitrile	<12.12	71.74	45.49	63	72.16	55.67	77	20	22-149	25	
Bromodichloromethane	<3.031	71.74	46.23	64	72.16	51.34	71	10	34-127	25	
cis-1,3-Dichloropropene	<3.031	71.74	36.85	51	72.16	42.85	59	15	22-122	25	
4-Methyl-2-Pentanone (MIBK)	<12.12	71.74	52.47	73	72.16	63.16	88	19	13-137	25	
trans-1,3-Dichloropropene	<3.031	71.74	34.86	49	72.16	40.13	56	13	25-118	25	
1,1,2-Trichloroethane	<3.031	71.74	49.09	68	72.16	55.49	77	12	32-132	25	
Toluene	<3.031	71.74	40.23	56	72.16	44.80	62	10	27-129	25	
1,3-Dichloropropane	<3.031	71.74	46.69	65	72.16	52.48	73	12	30-130	25	
2-Hexanone (MBK)	<12.12	71.74	33.30	46	72.16	43.45	60	26	4-120	25	F
1,2-Dibromoethane	<3.031	71.74	41.79	58	72.16	48.80	68	16	35-132	25	
Dibromochloromethane	<3.031	71.74	44.29	62	72.16	50.26	70	12	30-130	25	
Acrolein	<12.12	71.74	62.82	88	72.16	74.22	103	16	12-153	25	
1,1,1,2-Tetrachloroethane	<3.031	71.74	42.78	60	72.16	47.70	66	10	37-126	25	
Bromoform	<3.031	71.74	41.46	58	72.16	48.59	67	14	19-125	25	
trans-1,4-dichloro-2-butene	<3.031	71.74	26.42	37	72.16	33.86	47	24	2-122	25	
Tetrachloroethene	<3.031	71.74	34.53	48	72.16	38.71	54	12	22-141	25	
Chlorobenzene	<3.031	71.74	34.18	48	72.16	38.23	53	10	25-127	25	
Ethylbenzene	<3.031	71.74	35.31	49	72.16	39.38	55	12	18-133	25	
m&p-Xylene	<6.061	143.5	68.63	48	144.3	76.68	53	10	18-134	25	
Styrene	<3.031	71.74	31.10	43	72.16	34.40	48	11	17-122	25	
1,1,2,2-Tetrachloroethane	<3.031	71.74	44.80	62	72.16	52.54	73	16	34-130	25	
o-Xylene	<3.031	71.74	35.92	50	72.16	40.30	56	11	16-139	25	

Matrix Spike Percent Recovery IDI = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery IG1 = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Project ID: N/A
Analyst: 1035
Matrix: Soil

Client Sample Id:
Sample ID: 10062811-001 S
Method: SW5030 / SW8260B

Date Prepared: 06/29/2010
Date Analyzed: 06/30/2010

Prep Batch #: 83371
Lab Batch ID: 83371
Reporting Units: ug/kg

Volatile Organic Compounds By Gas Chromatograph/Mass Spectrometry (GC/MS): Capillary Column Techniw		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2,3-Trichloropropane	<3.031	71.74	45.28	63	72.16	55.01	76	19	23-134	25		
1,3-Dichlorobenzene	<3.031	71.74	23.41	33	72.16	26.10	36	9	21-123	25		
1,4-Dichlorobenzene	<3.031	71.74	22.72	32	72.16	25.36	35	9	29-115	25		
1,2-Dichlorobenzene	<3.031	71.74	24.77	35	72.16	28.34	39	11	20-126	25		
1,2-Dibromo-3-chloropropane	<24.24	71.74	38.63	54	72.16	48.03	67	21	33-125	25		
1,2,4-Trichlorobenzene	<3.031	71.74	12.45	17	72.16	14.01	19	11	12-108	25		
Iodomethane	<12.12	71.74	33.87	47	72.16	45.69	63	29	22-131	25	F	
Naphthalene	<3.031	71.74	16.98	24	72.16	19.34	27	12	36-155	25	X	
1,2,3-Trichlorobenzene	<3.031	71.74	12.83	18	72.16	14.43	20	11	5-111	25		

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 33431

Lab Batch ID: 83437

Reporting Units: ug/kg

Date Prepared: 07/01/2010

Date Analyzed: 07/02/2010

Client Sample Id: Gude-MW8-SO-8 to 10 S

Sample ID: 10062518-003 S

Method: SW3550/SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Gc/MS For Semivolatile Organics (Capillary Column Technique)	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<102.7	1641	1630	99	1643	1573	96	3	52-128	30	
Acenaphthylene	<102.7	1641	1632	99	1643	1570	96	3	59-119	30	
Acetophenone	<102.7	1641	1597	97	1643	1552	94	3	53-115	30	
Anthracene	<102.7	1641	1622	99	1643	1548	94	5	51-137	30	
Benzo(a)anthracene	<102.7	1641	1741	106	1643	1652	101	5	45-163	30	
Benzo(a)pyrene	<102.7	1641	1854	113	1643	1764	107	5	52-164	30	
Benzo(b)fluoranthene	<102.7	1641	1874	114	1643	1782	108	5	58-154	30	
Benzo(g,h,i)perylene	<102.7	1641	1988	121	1643	1789	109	10	37-144	30	
Benzo(k)fluoranthene	<102.7	1641	1708	104	1643	1653	101	3	49-160	30	
Benzyl butyl phthalate	<102.7	1641	2137	130	1643	1982	121	7	40-179	30	
bis(2-chloroethoxy) methane	<102.7	1641	1586	97	1643	1558	95	2	53-120	30	
bis(2-chloroethyl) ether	<102.7	1641	1568	96	1643	1523	93	3	47-116	30	
bis(2-chloroisopropyl) ether	<102.7	1641	1486	91	1643	1440	88	3	45-112	30	
bis(2-ethylhexyl) phthalate	<102.7	1641	2150	131	1643	1988	121	8	43-172	30	
4-Bromophenylphenyl ether	<102.7	1641	1783	109	1643	1756	107	2	44-159	30	
Di-n-butyl phthalate	<205.4	1641	1660	101	1643	1580	96	5	54-131	30	
4-Chloro-3-methylphenol	<102.7	1641	1701	104	1643	1663	101	3	57-130	30	
4-Chloroaniline	<205.4	1641	1622	99	1643	1572	96	3	50-122	30	
2-Chloronaphthalene	<102.7	1641	1529	93	1643	1490	91	2	50-124	30	
2-Chlorophenol	<102.7	1641	1614	98	1643	1578	96	2	54-119	30	
4-Chlorophenyl phenyl ether	<102.7	1641	1611	98	1643	1562	95	3	57-133	30	
Chrysene	<102.7	1641	1709	104	1643	1621	99	5	42-165	30	
Dibenz(a,h)anthracene	<102.7	1641	2068	126	1643	1874	114	10	37-140	30	
Dibenzofuran	<102.7	1641	1611	98	1643	1560	95	3	44-138	30	

Matrix Spike Percent Recovery IDI = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #:

Lab Batch ID: 83437

Reporting Units: ug/kg

Date Prepared: 07/01/2010

Date Analyzed: 07/02/2010

Client Sample Id:

Sample ID: 10062518-003 S

Method: SW3550 /SW8270C

Project ID: N/A

Analyst: 1040

Matrix: Soil

Gc/MS For Semivolatile Organics (Capillary Column Technique)	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
3,3-Dichlorobenzidine	<102.7	1641	1302	79	1643	1214	74	7	11-140	30	
2,4-Dichlorophenol	<102.7	1641	1695	103	1643	1670	102	1	56-131	30	
Diethyl phthalate	<102.7	1641	1735	106	1643	1630	99	7	51-126	30	
Dimethyl phthalate	<102.7	1641	1729	105	1643	1663	101	4	56-120	30	
2,4-Dimethylphenol	<102.7	1641	1468	89	1643	1414	86	3	49-124	30	
4,6-Dinitro-2-methyl phenol	<102.7	1641	1861	113	1643	1836	112	1	1-187	30	
2,4-Dinitrophenol	<205.4	1641	1815	111	1643	1804	110	1	4-200	30	
2,4-Dinitrotoluene	<102.7	1641	1734	106	1643	1645	100	6	57-138	30	
2,6-Dinitrotoluene	<102.7	1641	1769	108	1643	1714	104	4	61-136	30	
Fluoranthene	<102.7	1641	1458	89	1643	1386	84	6	40-155	30	
Fluorene	<102.7	1641	1598	97	1643	1538	94	3	55-128	30	
Hexachlorobenzene	<102.7	1641	1731	105	1643	1669	102	3	52-129	30	
Hexachlorobutadiene	<102.7	1641	1587	97	1643	1562	95	2	50-128	30	
Hexachlorocyclopentadiene	<102.7	1641	1402	85	1643	1412	86	1	13-144	30	
Hexachloroethane	<102.7	1641	1528	93	1643	1474	90	3	42-117	30	
Indeno(1,2,3-c,d)pyrene	<102.7	1641	2143	131	1643	1949	119	10	48-135	30	
Isophorone	<102.7	1641	1605	98	1643	1569	95	3	51-114	30	
2-Methylnaphthalene	<102.7	1641	1550	94	1643	1508	92	2	49-130	30	
2-Methylphenol	<102.7	1641	1618	99	1643	1594	97	2	54-119	30	
3&4-Methylphenol	<102.7	1641	1559	95	1643	1515	92	3	50-115	30	
4-Nitroaniline	<102.7	1641	1409	86	1643	1309	80	7	50-133	30	
3-Nitroaniline	<102.7	1641	1674	102	1643	1541	94	8	49-133	30	
2-Nitroaniline	<205.4	1641	1783	109	1643	1736	106	3	53-133	30	
Nitrobenzene	<102.7	1641	1568	96	1643	1533	93	3	48-113	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 83437

Lab Batch ID: 83437

Reporting Units: ug/kg

Date Prepared: 07/01/2010
Date Analyzed: 07/02/2010

Client Sample Id: 10062518-003 S
Sample ID: 10062518-003 S
Method: SW3550 /SW8270C

Project ID: N/A
Analyst: 1040
Matrix: Soil

Gc/MS For Semivolatile Organics (Capillary Column Technique)	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2-Nitrophenol	<102.7	1641	1800	110	1643	1792	109	1	56-136	30	
4-Nitrophenol	<102.7	1641	1525	93	1643	1420	86	8	47-135	30	
N-Nitrosodimethylamine	<102.7	1641	1556	95	1643	1521	93	2	45-122	30	
N-Nitrosodi-n-propylamine	<102.7	1641	1525	93	1643	1471	90	3	44-113	30	
N-Nitrosodiphenylamine	<102.7	1641	1672	102	1643	1650	100	2	57-124	30	
Di-n-octyl phthalate	<102.7	1641	1930	118	1643	1889	115	3	25-185	30	
1,2,4,5-Tetrachlorobenzene	<102.7	1641	1616	98	1643	1569	95	3	51-131	30	
Pentachlorophenol	<205.4	1641	1702	104	1643	1590	97	7	34-154	30	
Phenanthrene	<102.7	1641	1600	98	1643	1535	93	5	46-141	30	
Phenol	<102.7	1641	1442	88	1643	1409	86	2	47-103	30	
Pyrene	<102.7	1641	2049	125	1643	1885	115	8	24-181	30	
2,3,4,6-Tetrachlorophenol	<102.7	1641	1807	110	1643	1732	105	5	49-141	30	
2,4,6-Trichlorophenol	<102.7	1641	1732	106	1643	1695	103	3	59-133	30	
2,4,5-Trichlorophenol	<102.7	1641	1762	107	1643	1746	106	1	61-138	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10062518

Prep Batch #: 83466

Lab Batch ID: 83466

Reporting Units: mg/kg

Date Prepared: 07/06/2010
Date Analyzed: 07/06/2010

Client Sample Id: Gude-MW13A-SO-4 to 6 S
Sample ID: 10062518-001 S
Method: /SW9014

Project ID: N/A
Analyst: 1022
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Cyanide, Total	<1.524	6.098	5.780	95	6.098	5.780	95	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

ANALYTICAL REPORT

Phase Sep Science East Station

Lot #: C0F290459

Betsy Orr

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.



Christina M. Kovitch
Project Manager

July 12, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture Arkansas	(#P330-10-00139) (#88-0690)	Foreign Soil Import Permit WW HW	X X X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002319)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203010)	WW –	X –
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Ptsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0F290459

Sample Receiving:

TestAmerica Pittsburgh received samples on June 29, 2010. The cooler was received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

OPP's:

There were no problems associated with the analysis.

General Chemistry:

There were no problems associated with the analysis.



Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Catonsville, MD 21228

Contact: Ken Ives
Phone: 410-869-0085

W.O. No.: 10062518

P.O. No.:

Project Name: Gude Landfill

Project Number: N/A

For Questions or issues please contact: Amy Friedlander

Report Due On : 07/16/10 05:00

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
10062518-001	Gude-MW13A-SO-4 to 6	06/25/10	13:20	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10062518-001	Gude-MW13A-SO-4 to 6	06/25/10	13:20	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10062518-002	Gude-MW7-SO-8 to 10	06/23/10	13:30	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10062518-002	Gude-MW7-SO-8 to 10	06/23/10	13:30	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10062518-003	Gude-MW8-SO-8 to 10	06/23/10	10:45	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10062518-003	Gude-MW8-SO-8 to 10	06/23/10	10:45	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10062518-004	Gude-MW6-SO-12 to 14	06/22/10	13:30	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10062518-004	Gude-MW6-SO-12 to 14	06/22/10	13:30	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10062518-005	Gude-MW13B-SO-2 to 4	06/25/10	14:50	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10062518-005	Gude-MW13B-SO-2 to 4	06/25/10	14:50	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL

Data Deliverables Required: Results and Copy of COC

Perform Q.C. on Sample :

Send Report Attn : BETSY ORR

Airbill No.: _____ Carrier: AMER COURIER

Condition Upon Receipt : _____

Comments : _____

Samples Relinquished By: RD Date: 6/28/10 Time: 1030 Samples Received By: [Signature]

Samples Relinquished By: [Signature] Date: 6-28-2010 Time: 1055 Samples Received By: _____

Samples Relinquished By: _____ Date: 6/29/10 Time: 1010 Samples Received By: [Signature]

Sub-Contractor

Method

Matrix

Analyte Name

METHODS SUMMARY

C0F290459

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Organophosphorous Compounds by GC	SW846 8141A	SW846 3541
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C0F290459

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L3JD4	001	10062518-001	06/25/10	13:20
L3JER	002	10062518-002	06/23/10	13:30
L3JET	003	10062518-003	06/23/10	10:45
L3JEX	004	10062518-004	06/22/10	13:30
L3JE3	005	10062518-005	06/25/10	14:50

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10062518-001

GC Semivolatiles

Lot-Sample #...: C0F290459-001 Work Order #...: L3JD41AC Matrix.....: SOLID
Date Sampled...: 06/25/10 Date Received..: 06/29/10 MS Run #.....: 0182209
Prep Date.....: 07/01/10 Analysis Date..: 07/09/10
Prep Batch #...: 0182401 Analysis Time..: 00:18
Dilution Factor: 1
% Moisture.....: 17 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	40	ug/kg
Disulfoton	ND	40	ug/kg
Famphur	ND	40	ug/kg
Methyl parathion	ND	40	ug/kg
Parathion	ND	40	ug/kg
Thionazin	ND	40	ug/kg
Phorate	ND	40	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Triphenyl phosphate	93	(47 - 130)
Tributyl phosphate	97	(55 - 125)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-002

GC Semivolatiles

Lot-Sample #...: C0F290459-002 Work Order #...: L3JER1AC Matrix.....: SOLID
 Date Sampled...: 06/23/10 Date Received..: 06/29/10 MS Run #.....: 0182209
 Prep Date.....: 07/01/10 Analysis Date..: 07/09/10
 Prep Batch #...: 0182401 Analysis Time..: 01:38
 Dilution Factor: 0.99
 % Moisture.....: 15 Method.....: SW846 8141A

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Dimethoate	7.0 J	39	ug/kg
Disulfoton	ND	39	ug/kg
Famphur	ND	39	ug/kg
Methyl parathion	ND	39	ug/kg
Parathion	ND	39	ug/kg
Thionazin	ND	39	ug/kg
Phorate	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Triphenyl phosphate	96	(47 - 130)
Tributyl phosphate	98	(55 - 125)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.
 J Estimated result. Result is less than RL.

Phase Separation Sciences

Client Sample ID: 10062518-003

GC Semivolatiles

Lot-Sample #...: C0F290459-003 Work Order #...: L3JET1AC Matrix.....: SOLID
Date Sampled...: 06/23/10 Date Received..: 06/29/10 MS Run #.....: 0182209
Prep Date.....: 07/01/10 Analysis Date..: 07/09/10
Prep Batch #...: 0182401 Analysis Time..: 02:04
Dilution Factor: 1
% Moisture.....: 18 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	40	ug/kg
Disulfoton	ND	40	ug/kg
Famphur	ND	40	ug/kg
Methyl parathion	ND	40	ug/kg
Parathion	ND	40	ug/kg
Thionazin	ND	40	ug/kg
Phorate	ND	40	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Triphenyl phosphate	89	(47 - 130)
Tributyl phosphate	92	(55 - 125)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-004

GC Semivolatiles

Lot-Sample #...: C0F290459-004 **Work Order #...**: L3JEX1AC **Matrix.....**: SOLID
Date Sampled...: 06/22/10 **Date Received..**: 06/29/10 **MS Run #.....**: 0182209
Prep Date.....: 07/01/10 **Analysis Date..**: 07/09/10
Prep Batch #...: 0182401 **Analysis Time..**: 02:31
Dilution Factor: 1
% Moisture.....: 20 **Method.....**: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	41	ug/kg
Disulfoton	ND	41	ug/kg
Famphur	ND	41	ug/kg
Methyl parathion	ND	41	ug/kg
Parathion	ND	41	ug/kg
Thionazin	ND	41	ug/kg
Phorate	ND	41	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	91	(47 - 130)	
Tributyl phosphate	93	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-005

GC Semivolatiles

Lot-Sample #...: C0F290459-005 Work Order #...: L3JE31AC Matrix.....: SOLID
Date Sampled...: 06/25/10 Date Received..: 06/29/10 MS Run #.....: 0182209
Prep Date.....: 07/01/10 Analysis Date..: 07/09/10
Prep Batch #...: 0182401 Analysis Time..: 02:58
Dilution Factor: 1
% Moisture.....: 12 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	37	ug/kg
Disulfoton	ND	37	ug/kg
Famphur	ND	37	ug/kg
Methyl parathion	ND	37	ug/kg
Parathion	ND	37	ug/kg
Thionazin	ND	37	ug/kg
Phorate	ND	37	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Triphenyl phosphate	87	(47 - 130)
Tributyl phosphate	89	(55 - 125)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: C0F290459
MB Lot-Sample #: C0G010000-401
Analysis Date...: 07/09/10
Dilution Factor: 1

Work Order #...: L3PJD1AA
Prep Date.....: 07/01/10
Prep Batch #...: 0182401

Matrix.....: SOLID
Analysis Time...: 03:52

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Thionazin	ND	33	ug/kg	SW846 8141A
Dimethoate	ND	33	ug/kg	SW846 8141A
Disulfoton	ND	33	ug/kg	SW846 8141A
Famphur	ND	33	ug/kg	SW846 8141A
Methyl parathion	ND	33	ug/kg	SW846 8141A
Parathion	ND	33	ug/kg	SW846 8141A
Phorate	ND	33	ug/kg	SW846 8141A
	<u>PERCENT</u>	<u>RECOVERY</u>		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Triphenyl phosphate	90	(47 - 130)		
Tributyl phosphate	92	(55 - 125)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F290459 Work Order #...: L3PJD1AC Matrix.....: SOLID
 LCS Lot-Sample#: C0G010000-401
 Prep Date.....: 07/01/10 Analysis Date...: 07/09/10
 Prep Batch #...: 0182401 Analysis Time...: 04:18
 Dilution Factor: 1

<u>PARAMETER</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	<u>METHOD</u>
Thionazin	107	(48 - 126)	SW846 8141A
Phorate	99	(41 - 143)	SW846 8141A
Disulfoton	104	(31 - 136)	SW846 8141A
Methyl parathion	98	(43 - 146)	SW846 8141A
Parathion	121	(52 - 133)	SW846 8141A
Famphur	108	(54 - 137)	SW846 8141A
Dimethoate	133	(40 - 143)	SW846 8141A

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Triphenyl phosphate	94	(47 - 130)
Tributyl phosphate	116	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0F290459 Work Order #...: L3JD41AE-MS Matrix.....: SOLID
 MS Lot-Sample #: C0F290459-001 L3JD41AF-MSD
 Date Sampled...: 06/25/10 Date Received...: 06/29/10 MS Run #.....: 0182209
 Prep Date.....: 07/01/10 Analysis Date...: 07/09/10
 Prep Batch #...: 0182401 Analysis Time...: 00:44
 Dilution Factor: 1 % Moisture.....: 17

<u>PARAMETER</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	RPD	RPD <u>LIMITS</u>	<u>METHOD</u>
Thionazin	101	(48 - 126)			SW846 8141A
	102	(48 - 126)	0.83	(0-27)	SW846 8141A
Phorate	96	(41 - 143)			SW846 8141A
	99	(41 - 143)	2.6	(0-30)	SW846 8141A
Disulfoton	101	(31 - 136)			SW846 8141A
	103	(31 - 136)	1.8	(0-30)	SW846 8141A
Methyl parathion	99	(43 - 146)			SW846 8141A
	98	(43 - 146)	0.88	(0-30)	SW846 8141A
Parathion	118	(52 - 133)			SW846 8141A
	119	(52 - 133)	0.65	(0-30)	SW846 8141A
Famphur	109	(54 - 137)			SW846 8141A
	109	(54 - 137)	0.13	(0-30)	SW846 8141A
Dimethoate	128	(40 - 143)			SW846 8141A
	130	(40 - 143)	1.2	(0-30)	SW846 8141A

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Triphenyl phosphate	91	(47 - 130)
	89	(47 - 130)
Tributyl phosphate	108	(55 - 125)
	107	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters
 Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-001

General Chemistry

Lot-Sample #...: C0F290459-001 Work Order #...: L3JD4 Matrix.....: SOLID
Date Sampled...: 06/25/10 Date Received...: 06/29/10
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	83.2	1.0	%	SM20 2540G	06/30-07/01/10	0181025
		Dilution Factor: 1		Analysis Time..: 08:19	MS Run #.....: 0181011	
Total Sulfide	ND	36.1	mg/kg	SW846 9030B/9034	07/01-07/02/10	0182147
		Dilution Factor: 1		Analysis Time..: 09:40	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-002

General Chemistry

Lot-Sample #...: C0F290459-002 Work Order #...: L3JER Matrix.....: SOLID
Date Sampled...: 06/23/10 Date Received...: 06/29/10
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	84.7	1.0	%	SM20 2540G	06/30-07/01/10	0181025
				Dilution Factor: 1	Analysis Time..: 08:19	MS Run #.....: 0181011
Total Sulfide	ND	35.4	mg/kg	SW846 9030B/9034	06/30-07/01/10	0181306
				Dilution Factor: 1	Analysis Time..: 14:35	MS Run #.....: 0181183

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-003

General Chemistry

Lot-Sample #...: C0F290459-003 Work Order #...: L3JET Matrix.....: SOLID
Date Sampled...: 06/23/10 Date Received...: 06/29/10
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	81.6	1.0	%	SM20 2540G	06/30-07/01/10	0181025
			Dilution Factor: 1	Analysis Time..: 08:19	MS Run #.....: 0181011	
Total Sulfide	41.2	36.8	mg/kg	SW846 9030B/9034	06/30-07/01/10	0181306
			Dilution Factor: 1	Analysis Time..: 14:35	MS Run #.....: 0181183	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-004

General Chemistry

Lot-Sample #...: C0F290459-004 Work Order #...: L3JEX Matrix.....: SOLID
Date Sampled...: 06/22/10 Date Received...: 06/29/10
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	80.4	1.0	%	SM20 2540G	06/30-07/01/10	0181025
			Dilution Factor: 1	Analysis Time..: 08:19	MS Run #.....: 0181011	
Total Sulfide	46.7	37.3	mg/kg	SW846 9030B/9034	06/30-07/01/10	0181306
			Dilution Factor: 1	Analysis Time..: 14:35	MS Run #.....: 0181183	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10062518-005

General Chemistry

Lot-Sample #...: C0F290459-005 Work Order #...: L3JE3 Matrix.....: SOLID
Date Sampled...: 06/25/10 Date Received...: 06/29/10
% Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	88.4	1.0	%	SM20 2540G	06/30-07/01/10	0181025
			Dilution Factor: 1	Analysis Time..: 08:19	MS Run #.....: 0181011	
Total Sulfide	ND	33.9	mg/kg	SW846 9030B/9034	07/01-07/02/10	0182147
			Dilution Factor: 1	Analysis Time..: 09:40	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0F290459

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Total Sulfide	ND	Work Order #: L3LFN1AA 30.0	mg/kg	MB Lot-Sample #: C0F300000-306 SW846 9030B/9034	06/30-07/01/10	0181306
		Dilution Factor: 1				
		Analysis Time..: 14:35				
Total Sulfide	ND	Work Order #: L3ML81AA 30.0	mg/kg	MB Lot-Sample #: C0G010000-147 SW846 9030B/9034	07/01-07/02/10	0182147
		Dilution Factor: 1				
		Analysis Time..: 09:40				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: C0F290459

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide		WO#:L3ML81AC-LCS/L3ML81AD-LCSD			LCS Lot-Sample#:	C0G010000-147	
	100	(85 - 115)			SW846 9030B/9034	07/01-07/02/10	0182147
	100	(85 - 115)	0.83	(0-20)	SW846 9030B/9034	07/01-07/02/10	0182147
		Dilution Factor: 1			Analysis Time.: 09:40		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F290459

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide	100	(85 - 115)	SW846 9030B/9034	06/30-07/01/10	0181306

Work Order #: L3LFN1AC LCS Lot-Sample#: C0F300000-306
Dilution Factor: 1 Analysis Time.: 14:35

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F290459

Matrix.....: SOLID

Date Sampled...: 06/24/10

Date Received...: 06/29/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Sulfide							
	97	(75 - 125)			SW846 9030B/9034	06/30-07/01/10	0181306
	102	(75 - 125)	3.5	(0-20)	SW846 9030B/9034	06/30-07/01/10	0181306
			Dilution Factor: 1				
			Analysis Time...: 14:35				
			MS Run #.....: 0181183				
			WO#: L3JQ51EV-MS/L3JQ51EW-MSD MS Lot-Sample #: C0F290514-005				
			% Moisture.....: 59				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F290459

Work Order #...: L3ERW-SMP
L3ERW-DUP

Matrix.....: SOLID

Date Sampled...: 06/24/10

Date Received...: 06/25/10

% Moisture.....: 23

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	77.2	77.4	%	0.19	(0-20)	SD Lot-Sample #: C0F250455-001 SM20 2540G	06/30-07/01/10	0181025
			Dilution Factor: 1			Analysis Time..: 08:19	MS Run Number..: 0181011	

Analytical Report for

EA Engineering

Certificate of Analysis No.: 10070220

Project Manager: Pete Lekas

Project Name : Gude

Project Location: Rockville, MD



July 23, 2010

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL
PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047

PHASE SEPARATION SCIENCE, INC.



July 23, 2010

Pete Lekas
EA Engineering
15 Loveton Circle
Sparks, MD 21152

Reference: PSS Work Order No: **10070220**
Project Name : Gude
Project Location: Rockville, MD

Dear Pete Lekas :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **10070220**.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on August 31, 2010. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

John Richardson
Laboratory Director



Case Narrative Summary

Client Name: EA Engineering
Project Name: Gude

Project ID: N/A

Work Order Number: 10070220

The following samples were received under chain of custody by Phase Separation Science (PSS) on 07/02/2010 at 03:57 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
10070220-001	Gude-MW11A-SO-14 to 16	SOIL	06/29/2010 15:40
10070220-002	Gude-MW11B-SO-18 to 20	SOIL	06/30/2010 11:30
10070220-003	Gude-SO-Dup3	SOIL	06/30/2010 12:00
10070220-004	Gude-MW10-SO-18 to 20	SOIL	07/02/2010 10:15

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in the Sample Receipt Checklist.

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Notes:

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than one-half of the reporting limit.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 Date/Time Sampled: 06/29/2010 15:40 PSS Sample ID: 10070220-001
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 82

Total Metals Analytical Method: SW846 6020 Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Arsenic	1.8	mg/kg	0.5		1	0.2	07/12/10	07/12/10 16:46	1034
Barium	120	mg/kg	2.4		1	1.2	07/12/10	07/14/10 23:44	1034
Beryllium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Cadmium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Chromium	29	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Cobalt	19	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Copper	33	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Lead	15	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Mercury	ND	mg/kg	0.10		1	0.05	07/12/10	07/12/10 16:46	1034
Nickel	42	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Selenium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Silver	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Thallium	ND	mg/kg	1.9		1	1	07/12/10	07/12/10 16:46	1034
Tin	ND	mg/kg	4.8		1	2.4	07/12/10	07/12/10 16:46	1034
Vanadium	43	mg/kg	2.4		1	1.2	07/12/10	07/12/10 16:46	1034
Zinc	75	mg/kg	9.7		1	4.8	07/12/10	07/14/10 23:44	1034

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CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 Date/Time Sampled: 06/29/2010 15:40 PSS Sample ID: 10070220-001
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 82

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
beta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
delta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Heptachlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Aldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
4,4-DDE	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Endosulfan I	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Dieldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Endrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
4,4-DDD	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Endosulfan II	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
4,4-DDT	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Methoxychlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Endrin ketone	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:10	1029
Toxaphene	ND	ug/kg	240		1	120	07/09/10	07/12/10 17:10	1029
Chlordane	ND	ug/kg	240		1	120	07/09/10	07/12/10 17:10	1029

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CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 Date/Time Sampled: 06/29/2010 15:40 PSS Sample ID: 10070220-001
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 82

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:06	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	240		1	120	07/13/10	07/14/10 19:41	1029
2,4,5-TP (Silvex)	ND	ug/kg	24		1	12	07/13/10	07/14/10 19:41	1029
2,4,5-T	ND	ug/kg	24		1	12	07/13/10	07/14/10 19:41	1029
Dinoseb	ND	ug/kg	120		1	60	07/13/10	07/14/10 19:41	1029

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 **Date/Time Sampled: 06/29/2010 15:40** **PSS Sample ID: 10070220-001**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 82**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Chloromethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Vinyl Chloride	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Bromomethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Chloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Acetone	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011
Trichlorofluoromethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,1-Dichloroethene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Methylene chloride	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,1-Dichloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Vinyl acetate	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
2-Butanone (MEK)	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Bromochloromethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Chloroform	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
2,2-Dichloropropane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,2-Dichloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,1-Dichloropropene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Carbon tetrachloride	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Benzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Dibromomethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,2-Dichloropropane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Carbon Disulfide	ND	ug/kg	10		1	5.2	07/08/10	07/08/10 17:31	1011
Trichloroethene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Acrylonitrile	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011
Bromodichloromethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 **Date/Time Sampled: 06/29/2010 15:40** **PSS Sample ID: 10070220-001**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 82**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Toluene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,3-Dichloropropane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
2-Hexanone (MBK)	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011
1,2-Dibromoethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Dibromochloromethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Acrolein	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Bromoform	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Tetrachloroethene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Chlorobenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Ethylbenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
m&p-Xylene	ND	ug/kg	10		1	5.2	07/08/10	07/08/10 17:31	1011
Styrene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
o-Xylene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	42		1	21	07/08/10	07/08/10 17:31	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Iodomethane	ND	ug/kg	21		1	10	07/08/10	07/08/10 17:31	1011
Naphthalene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.6	07/08/10	07/08/10 17:31	1011
Nonanal (TIC)	7	ug/kg	10		1	5.2	07/08/10	07/08/10 17:31	1011
Heptanal (TIC)	15	ug/kg	10		1	5.2	07/08/10	07/08/10 17:31	1011
Hexanal (TIC)	13	ug/kg	10		1	5.2	07/08/10	07/08/10 17:31	1011

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CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16	Date/Time Sampled: 06/29/2010 15:40	PSS Sample ID: 10070220-001
Matrix: SOIL	Date/Time Received: 07/02/2010 15:57	% Solids: 82

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Octanal (TIC)	26	ug/kg	10		1	5.2	07/08/10	07/08/10 17:31	1011

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 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 **Date/Time Sampled: 06/29/2010 15:40** **PSS Sample ID: 10070220-001**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 82**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Acenaphthylene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Acetophenone	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Anthracene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Benzo(a)anthracene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Benzo(a)pyrene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Benzo(b)fluoranthene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Benzo(g,h,i)perylene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Benzo(k)fluoranthene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Benzyl butyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
bis(2-chloroethyl) ether	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
4-Bromophenylphenyl ether	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Di-n-butyl phthalate	ND	ug/kg	410		1	200	07/09/10	07/09/10 18:06	1014
4-Chloro-3-methylphenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
4-Chloroaniline	ND	ug/kg	410		1	200	07/09/10	07/09/10 18:06	1014
2-Chloronaphthalene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2-Chlorophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Chrysene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Dibenz(a,h)anthracene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Dibenzofuran	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
3,3-Dichlorobenzidine	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2,4-Dichlorophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Diethyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Dimethyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2,4-Dimethylphenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 **Date/Time Sampled: 06/29/2010 15:40** **PSS Sample ID: 10070220-001**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 82**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	410		1	200	07/09/10	07/09/10 18:06	1014
2,4-Dinitrotoluene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2,6-Dinitrotoluene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Fluoranthene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Fluorene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Hexachlorobenzene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Hexachlorobutadiene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Hexachlorocyclopentadiene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Hexachloroethane	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Isophorone	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2-Methylnaphthalene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2-Methylphenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
3&4-Methylphenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
4-Nitroaniline	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
3-Nitroaniline	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2-Nitroaniline	ND	ug/kg	410		1	200	07/09/10	07/09/10 18:06	1014
Nitrobenzene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2-Nitrophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
4-Nitrophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
N-Nitrosodimethylamine	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
N-Nitrosodiphenylamine	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Di-n-octyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Pentachlorophenol	ND	ug/kg	410		1	200	07/09/10	07/09/10 18:06	1014
Phenanthrene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Phenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Pyrene	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11A-SO-14 to 16 Date/Time Sampled: 06/29/2010 15:40 PSS Sample ID: 10070220-001
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 82

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
2,4,5-Trichlorophenol	ND	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
9-Octadecenamide, (Z)- (TIC)	360	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014
Dibenzylidene 4,4'-biphenylenediam (TIC)	550	ug/kg	200		1	100	07/09/10	07/09/10 18:06	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	07/12/10	07/12/10 16:30	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 Date/Time Sampled: 06/30/2010 11:30 PSS Sample ID: 10070220-002
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 80

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Arsenic	1.3	mg/kg	0.6		1	0.3	07/12/10	07/12/10 17:17	1034
Barium	270	mg/kg	2.8	E	1	1.4	07/12/10	07/12/10 17:17	1034
Beryllium	ND	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Cadmium	ND	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Chromium	54	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Cobalt	24	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Copper	65	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Lead	11	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Mercury	ND	mg/kg	0.11		1	0.06	07/12/10	07/12/10 17:17	1034
Nickel	49	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Selenium	ND	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Silver	ND	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Thallium	ND	mg/kg	2.2		1	1.1	07/12/10	07/12/10 17:17	1034
Tin	ND	mg/kg	5.6		1	2.8	07/12/10	07/12/10 17:17	1034
Vanadium	75	mg/kg	2.8		1	1.4	07/12/10	07/12/10 17:17	1034
Zinc	130	mg/kg	11		1	5.6	07/12/10	07/15/10 00:14	1034

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 Date/Time Sampled: 06/30/2010 11:30 PSS Sample ID: 10070220-002
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 80

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
beta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
delta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Heptachlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Aldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
4,4-DDE	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Endosulfan I	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Dieldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Endrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
4,4-DDD	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Endosulfan II	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
4,4-DDT	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Methoxychlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Endrin ketone	ND	ug/kg	24		1	12	07/09/10	07/12/10 17:38	1029
Toxaphene	ND	ug/kg	240		1	120	07/09/10	07/12/10 17:38	1029
Chlordane	ND	ug/kg	240		1	120	07/09/10	07/12/10 17:38	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 Date/Time Sampled: 06/30/2010 11:30 PSS Sample ID: 10070220-002
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 80

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 13:35	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	250		1	120	07/13/10	07/14/10 20:14	1029
2,4,5-TP (Silvex)	ND	ug/kg	25		1	12	07/13/10	07/14/10 20:14	1029
2,4,5-T	ND	ug/kg	25		1	12	07/13/10	07/14/10 20:14	1029
Dinoseb	ND	ug/kg	120		1	62	07/13/10	07/14/10 20:14	1029

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 **Date/Time Sampled: 06/30/2010 11:30** **PSS Sample ID: 10070220-002**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Chloromethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Vinyl Chloride	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Bromomethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Chloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Acetone	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011
Trichlorofluoromethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,1-Dichloroethene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Methylene chloride	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
trans-1,2-Dichloroethene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,1-Dichloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Vinyl acetate	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
2-Butanone (MEK)	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011
cis-1,2-Dichloroethene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Bromochloromethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Chloroform	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
2,2-Dichloropropane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,1,1-Trichloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,2-Dichloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,1-Dichloropropene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Carbon tetrachloride	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Benzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Dibromomethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,2-Dichloropropane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Carbon Disulfide	ND	ug/kg	12		1	5.8	07/08/10	07/08/10 18:00	1011
Trichloroethene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Acrylonitrile	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011
Bromodichloromethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
cis-1,3-Dichloropropene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 **Date/Time Sampled: 06/30/2010 11:30** **PSS Sample ID: 10070220-002**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,1,2-Trichloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Toluene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,3-Dichloropropane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
2-Hexanone (MBK)	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011
1,2-Dibromoethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Dibromochloromethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Acrolein	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Bromoform	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Tetrachloroethene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Chlorobenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Ethylbenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
m&p-Xylene	ND	ug/kg	12		1	5.8	07/08/10	07/08/10 18:00	1011
Styrene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
o-Xylene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,2,3-Trichloropropane	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,3-Dichlorobenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,4-Dichlorobenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,2-Dichlorobenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	46		1	23	07/08/10	07/08/10 18:00	1011
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Iodomethane	ND	ug/kg	23		1	12	07/08/10	07/08/10 18:00	1011
Naphthalene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	2.9	07/08/10	07/08/10 18:00	1011
Octanal (TIC)	36	ug/kg	12		1	5.8	07/08/10	07/08/10 18:00	1011
Hexanal (TIC)	15	ug/kg	12		1	5.8	07/08/10	07/08/10 18:00	1011
Heptanal (TIC)	14	ug/kg	12		1	5.8	07/08/10	07/08/10 18:00	1011

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20	Date/Time Sampled: 06/30/2010 11:30	PSS Sample ID: 10070220-002
Matrix: SOIL	Date/Time Received: 07/02/2010 15:57	% Solids: 80

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Nonanal (TIC)	13	ug/kg	12		1	5.8	07/08/10	07/08/10 18:00	1011

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 **Date/Time Sampled: 06/30/2010 11:30** **PSS Sample ID: 10070220-002**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Acenaphthylene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Acetophenone	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Anthracene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Benzo(a)anthracene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Benzo(a)pyrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Benzo(b)fluoranthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Benzo(g,h,i)perylene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Benzo(k)fluoranthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Benzyl butyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
bis(2-chloroethyl) ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
4-Bromophenylphenyl ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Di-n-butyl phthalate	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:04	1014
4-Chloro-3-methylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
4-Chloroaniline	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:04	1014
2-Chloronaphthalene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2-Chlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Chrysene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Dibenz(a,h)anthracene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Dibenzofuran	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
3,3-Dichlorobenzidine	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2,4-Dichlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Diethyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Dimethyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2,4-Dimethylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 **Date/Time Sampled: 06/30/2010 11:30** **PSS Sample ID: 10070220-002**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:04	1014
2,4-Dinitrotoluene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2,6-Dinitrotoluene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Fluoranthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Fluorene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Hexachlorobenzene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Hexachlorobutadiene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Hexachlorocyclopentadiene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Hexachloroethane	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Isophorone	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2-Methylnaphthalene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2-Methylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
3&4-Methylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
4-Nitroaniline	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
3-Nitroaniline	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2-Nitroaniline	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:04	1014
Nitrobenzene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2-Nitrophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
4-Nitrophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
N-Nitrosodimethylamine	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
N-Nitrosodiphenylamine	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Di-n-octyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Pentachlorophenol	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:04	1014
Phenanthrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Phenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
Pyrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW11B-SO-18 to 20 Date/Time Sampled: 06/30/2010 11:30 PSS Sample ID: 10070220-002
Matrix: SOIL Date/Time Received: 07/02/2010 15:57 % Solids: 80

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
2,4,5-Trichlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014
9-Octadecenamide, (Z)- (TIC)	1,600	ug/kg	210		1	100	07/09/10	07/09/10 22:04	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	07/12/10	07/12/10 16:30	1022

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CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
beta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
delta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Heptachlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Aldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
4,4-DDE	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Endosulfan I	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Dieldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Endrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
4,4-DDD	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Endosulfan II	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
4,4-DDT	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Methoxychlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Endrin ketone	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:07	1029
Toxaphene	ND	ug/kg	240		1	120	07/09/10	07/12/10 18:07	1029
Chlordane	ND	ug/kg	240		1	120	07/09/10	07/12/10 18:07	1029

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CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:28	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	250		1	120	07/13/10	07/15/10 00:00	1029
2,4,5-TP (Silvex)	ND	ug/kg	25		1	12	07/13/10	07/15/10 00:00	1029
2,4,5-T	ND	ug/kg	25		1	12	07/13/10	07/15/10 00:00	1029
Dinoseb	ND	ug/kg	120		1	62	07/13/10	07/15/10 00:00	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Chloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Vinyl Chloride	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Bromomethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Chloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Acetone	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011
Trichlorofluoromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,1-Dichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Methylene chloride	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
trans-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,1-Dichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Vinyl acetate	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
2-Butanone (MEK)	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011
cis-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Bromochloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Chloroform	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
2,2-Dichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,1,1-Trichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,2-Dichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,1-Dichloropropene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Carbon tetrachloride	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Benzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Dibromomethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,2-Dichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Carbon Disulfide	ND	ug/kg	11		1	5.6	07/08/10	07/08/10 18:28	1011
Trichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Acrylonitrile	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011
Bromodichloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
cis-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,1,2-Trichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Toluene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,3-Dichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
2-Hexanone (MBK)	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011
1,2-Dibromoethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Dibromochloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Acrolein	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Bromoform	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Tetrachloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Chlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Ethylbenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
m&p-Xylene	ND	ug/kg	11		1	5.6	07/08/10	07/08/10 18:28	1011
Styrene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
o-Xylene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,2,3-Trichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,3-Dichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,4-Dichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,2-Dichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	45		1	23	07/08/10	07/08/10 18:28	1011
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Iodomethane	ND	ug/kg	23		1	11	07/08/10	07/08/10 18:28	1011
Naphthalene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:28	1011
Hexanal (TIC)	12	ug/kg	11		1	5.6	07/08/10	07/08/10 18:28	1011
Nonanal (TIC)	16	ug/kg	11		1	5.6	07/08/10	07/08/10 18:28	1011
Octanal (TIC)	34	ug/kg	11		1	5.6	07/08/10	07/08/10 18:28	1011

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3	Date/Time Sampled: 06/30/2010 12:00	PSS Sample ID: 10070220-003
Matrix: SOIL	Date/Time Received: 07/02/2010 15:57	% Solids: 80

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Heptanal (TIC)	10	ug/kg	11		1	5.6	07/08/10	07/08/10 18:28	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Acenaphthylene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Acetophenone	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Anthracene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Benzo(a)anthracene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Benzo(a)pyrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Benzo(b)fluoranthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Benzo(g,h,i)perylene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Benzo(k)fluoranthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Benzyl butyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
bis(2-chloroethyl) ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
4-Bromophenylphenyl ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Di-n-butyl phthalate	ND	ug/kg	410		1	210	07/09/10	07/09/10 21:35	1014
4-Chloro-3-methylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
4-Chloroaniline	ND	ug/kg	410		1	210	07/09/10	07/09/10 21:35	1014
2-Chloronaphthalene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2-Chlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Chrysene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Dibenz(a,h)anthracene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Dibenzofuran	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
3,3-Dichlorobenzidine	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2,4-Dichlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Diethyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Dimethyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2,4-Dimethylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	410		1	210	07/09/10	07/09/10 21:35	1014
2,4-Dinitrotoluene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2,6-Dinitrotoluene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Fluoranthene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Fluorene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Hexachlorobenzene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Hexachlorobutadiene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Hexachlorocyclopentadiene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Hexachloroethane	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Isophorone	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2-Methylnaphthalene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2-Methylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
3&4-Methylphenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
4-Nitroaniline	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
3-Nitroaniline	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2-Nitroaniline	ND	ug/kg	410		1	210	07/09/10	07/09/10 21:35	1014
Nitrobenzene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2-Nitrophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
4-Nitrophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
N-Nitrosodimethylamine	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
N-Nitrosodiphenylamine	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Di-n-octyl phthalate	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Pentachlorophenol	ND	ug/kg	410		1	210	07/09/10	07/09/10 21:35	1014
Phenanthrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Phenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
Pyrene	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-SO-Dup3 **Date/Time Sampled: 06/30/2010 12:00** **PSS Sample ID: 10070220-003**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 80**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
2,4,5-Trichlorophenol	ND	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014
9-Octadecenamide, (Z)- (TIC)	2,000	ug/kg	210		1	100	07/09/10	07/09/10 21:35	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.1		1	1.5	07/12/10	07/12/10 16:30	1022

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CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Arsenic	1.3	mg/kg	0.5		1	0.2	07/12/10	07/12/10 17:47	1034
Barium	160	mg/kg	2.4		1	1.2	07/12/10	07/15/10 00:44	1034
Beryllium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Cadmium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Chromium	36	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Cobalt	14	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Copper	49	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Lead	7.4	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Mercury	ND	mg/kg	0.10		1	0.05	07/12/10	07/12/10 17:47	1034
Nickel	27	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Selenium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Silver	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Thallium	ND	mg/kg	1.9		1	1	07/12/10	07/12/10 17:47	1034
Tin	ND	mg/kg	4.8		1	2.4	07/12/10	07/12/10 17:47	1034
Vanadium	52	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:47	1034
Zinc	81	mg/kg	9.6		1	4.8	07/12/10	07/15/10 00:44	1034

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
beta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
delta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Heptachlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Aldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
4,4-DDE	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Endosulfan I	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Dieldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Endrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
4,4-DDD	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Endosulfan II	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
4,4-DDT	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Methoxychlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Endrin ketone	ND	ug/kg	24		1	12	07/09/10	07/12/10 18:35	1029
Toxaphene	ND	ug/kg	240		1	120	07/09/10	07/12/10 18:35	1029
Chlordane	ND	ug/kg	240		1	120	07/09/10	07/12/10 18:35	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 17:57	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	250		1	120	07/13/10	07/14/10 20:47	1029
2,4,5-TP (Silvex)	ND	ug/kg	25		1	12	07/13/10	07/14/10 20:47	1029
2,4,5-T	ND	ug/kg	25		1	12	07/13/10	07/14/10 20:47	1029
Dinoseb	ND	ug/kg	120		1	62	07/13/10	07/14/10 20:47	1029

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CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Chloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Vinyl Chloride	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Bromomethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Chloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Acetone	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011
Trichlorofluoromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,1-Dichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Methylene chloride	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
trans-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,1-Dichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Vinyl acetate	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
2-Butanone (MEK)	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011
cis-1,2-Dichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Bromochloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Chloroform	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
2,2-Dichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,1,1-Trichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,2-Dichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,1-Dichloropropene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Carbon tetrachloride	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Benzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Dibromomethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,2-Dichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Carbon Disulfide	ND	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011
Trichloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Acrylonitrile	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011
Bromodichloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
cis-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,1,2-Trichloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Toluene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,3-Dichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
2-Hexanone (MBK)	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011
1,2-Dibromoethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Dibromochloromethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Acrolein	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Bromoform	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Tetrachloroethene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Chlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Ethylbenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
m&p-Xylene	ND	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011
Styrene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
o-Xylene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,2,3-Trichloropropane	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,3-Dichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,4-Dichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,2-Dichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	44		1	22	07/08/10	07/08/10 18:57	1011
1,2,4-Trichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Iodomethane	ND	ug/kg	22		1	11	07/08/10	07/08/10 18:57	1011
Naphthalene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
1,2,3-Trichlorobenzene	ND	ug/kg	6		1	2.8	07/08/10	07/08/10 18:57	1011
Hexanal (TIC)	16	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011
Octanal (TIC)	56	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011
Decanal (TIC)	7	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Nonanal (TIC)	36	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011
Heptanal (TIC)	12	ug/kg	11		1	5.5	07/08/10	07/08/10 18:57	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Acenaphthylene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Acetophenone	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Anthracene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Benzo(a)anthracene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Benzo(a)pyrene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Benzo(b)fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Benzo(g,h,i)perylene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Benzo(k)fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Benzyl butyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
bis(2-chloroethyl) ether	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
4-Bromophenylphenyl ether	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Di-n-butyl phthalate	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:34	1014
4-Chloro-3-methylphenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
4-Chloroaniline	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:34	1014
2-Chloronaphthalene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2-Chlorophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Chrysene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Dibenz(a,h)anthracene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Dibenzofuran	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
3,3-Dichlorobenzidine	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2,4-Dichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Diethyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Dimethyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2,4-Dimethylphenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014

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 ROUTE 40 WEST
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 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220

EA Engineering, Sparks, MD

July 23, 2010

Project Name: Gude

Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:34	1014
2,4-Dinitrotoluene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2,6-Dinitrotoluene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Fluorene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Hexachlorobenzene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Hexachlorobutadiene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Hexachlorocyclopentadiene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Hexachloroethane	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Isophorone	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2-Methylnaphthalene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2-Methylphenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
3&4-Methylphenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
4-Nitroaniline	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
3-Nitroaniline	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2-Nitroaniline	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:34	1014
Nitrobenzene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2-Nitrophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
4-Nitrophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
N-Nitrosodimethylamine	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
N-Nitrosodiphenylamine	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Di-n-octyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Pentachlorophenol	ND	ug/kg	420		1	210	07/09/10	07/09/10 22:34	1014
Phenanthrene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Phenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
Pyrene	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014

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 ROUTE 40 WEST
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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070220
 EA Engineering, Sparks, MD
 July 23, 2010

Project Name: Gude
 Project Location: Rockville, MD

Sample ID: Gude-MW10-SO-18 to 20 **Date/Time Sampled: 07/02/2010 10:15** **PSS Sample ID: 10070220-004**
Matrix: SOIL **Date/Time Received: 07/02/2010 15:57** **% Solids: 79**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
2,4,5-Trichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014
9-Octadecenamide, (Z)- (TIC)	1,200	ug/kg	210		1	110	07/09/10	07/09/10 22:34	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	07/12/10	07/12/10 16:30	1022



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

www.phaseonline.com
email: info@phaseonline.com

PHASE SEPARATION SCIENCE, INC.

1 CLIENT: EA Engineering OFFICE LOC. Sparks MD PSS Work Order # 10070220 PAGE 1 OF 1

PROJECT MGR: Peter Lekas PHONE NO.: (410) 771-4950 Matrix Codes: SM=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil WL=Waste Liquid WS=Waste Solid W=Wipe

EMAIL: plekas@east.com FAX NO.: (410) 771-4204

PROJECT NAME: Gude PROJECT NO.:

SITE LOCATION: Rockville MD P.O. NO.:

SAMPLERS: Joseph Sawicki

LAB NO	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX (See Codes)	CONTAINERS										REMARKS			
					No.	SAMPLE TYPE	C = COMP	G = GRAB	Preservatives Used	Analyst/Method Required	3	Metals 6020	VOC 826015035	Herbicide 8181		Pesticide 8081	PCB 8082	Organic Phosphate
1	Gude - MW 11 A - SO - 14 to 16	6/28/10	15:40	S	8	C			X	X	X	X	X	X	X	X	X	
2	Gude - MW 11 B - SO - 18 to 20	6/30/10	11:30		1				X	X	X	X	X	X	X	X	X	
3	Gude - SO - Dup 3	6/30/10	12:00		1				X	X	X	X	X	X	X	X	X	
4	Gude - MW 10 - SO - 17 to 20	7/2/10	10:15		1				X	X	X	X	X	X	X	X	X	

4 Requested Turnaround Time: 5-Day 3-Day 2-Day Other
 Data Deliverables Required: Next Day Emergency Other
 # of Coolers: 1 Custody Seal: None Ice Present: Present Temp: 33 C
 Shipping Carrier: Chemt

5 Relinquished By: (1) [Signature] Received By: [Signature] Date: 7/2/10 Time: 15:57

Relinquished By: (2) _____ Received By: _____ Date: _____ Time: _____

Relinquished By: (3) _____ Received By: _____ Date: _____ Time: _____

Relinquished By: (4) _____ Received By: _____ Date: _____ Time: _____

Special Instructions: EDD

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723
 The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.



Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number	10070220	Received By	Cathy Thompson
Client Name	EA Engineering	Date Received	07/02/2010 03:57:00 PM
Project Name	Gude	Delivered By	Client
Project Number	N/A	Tracking No	Not Applicable
Disposal Date:	08/31/2010	Logged In By	Rachel Davis

Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seals	Not Applicable	Temp (deg C)	3
Seal Condition	Not Applicable	Temp Blank Present	No

Documentation

COC agrees with sample labels? Yes or No Sampler Name: Joseph Sawicki
 Chain of Custody (COC) Yes or No MD DW Cert. No.: N/A

Sample Container

Appropriate for Specified Analysis?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Custody Seal(s)	Absent
Intact?	<input type="checkbox"/> <input type="checkbox"/>	Custody Seal(s) Intact?	Not Applicable
Labeled and Labels Legible	<input type="checkbox"/> <input type="checkbox"/>	Seal(s) Signed / Dated	Not Applicable
Total No. of Samples Received	4	Total No. of Containers Received	32

Preservation

		Yes	No	N/A
Metals	(pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cyanides	(pH>12)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sulfide	(pH>9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOC, COD, Phenols	(pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOX, TKN, NH3, Total Phos	(pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do VOA vials have zero headspace?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling

Samples Inspected/Checklist Completed By: _____ Date: _____
 PM Review and Approval: _____ Date: _____

Analytical Data Package Information Summary for W.O 10070220

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
AD2216A	Gude-MW10-SO-18 to 20	Initial	10070220-004	1041	S	83516	83516	07/02/2010	07/02/2010	07/09/2010	07/09/2010
	Gude-MW11A-SO-14 to 16	Initial	10070220-001	1041	S	83516	83516	06/29/2010	07/02/2010	07/09/2010	07/09/2010
	Gude-MW11B-SO-18 to 20	Initial	10070220-002	1041	S	83516	83516	06/30/2010	07/02/2010	07/09/2010	07/09/2010
	Gude-SO-Dup3	Initial	10070220-003	1041	S	83516	83516	06/30/2010	07/02/2010	07/09/2010	07/09/2010
SW846 6020	33518-1-BKS	BKS	33518-1-BKS	1034	S	33518	83559	-----	07/02/2010	07/12/2010	07/12/2010
	33518-1-BLK	BLK	33518-1-BLK	1034	S	33518	83559	-----	07/02/2010	07/12/2010	07/12/2010
	Gude-MW10-SO-18 to 20	Initial	10070220-004	1034	S	33518	83559	07/02/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-MW11A-SO-14 to 16	Initial	10070220-001	1034	S	33518	83559	06/29/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1034	S	33518	83559	06/29/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1034	S	33518	83559	06/29/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-MW11B-SO-18 to 20	Initial	10070220-002	1034	S	33518	83559	06/30/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-SO-Dup3	Initial	10070220-003	1034	S	33518	83559	06/30/2010	07/02/2010	07/12/2010	07/12/2010
	33518-1-BKS	BKS	33518-1-BKS	1034	S	33518	83620	-----	07/02/2010	07/12/2010	07/14/2010
	33518-1-BLK	BLK	33518-1-BLK	1034	S	33518	83620	-----	07/02/2010	07/12/2010	07/14/2010
SW846 8081B	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1034	S	33518	83620	06/29/2010	07/02/2010	07/12/2010	07/14/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1034	S	33518	83620	06/29/2010	07/02/2010	07/12/2010	07/14/2010
	33515-1-BKS	BKS	33515-1-BKS	1029	S	33515	83560	-----	07/02/2010	07/09/2010	07/12/2010
	33515-1-BLK	BLK	33515-1-BLK	1029	S	33515	83560	-----	07/02/2010	07/09/2010	07/12/2010
	33515-1-BSD	BSD	33515-1-BSD	1029	S	33515	83560	-----	07/02/2010	07/09/2010	07/12/2010
	Gude-MW10-SO-18 to 20	Initial	10070220-004	1029	S	33515	83560	07/02/2010	07/02/2010	07/09/2010	07/12/2010
	Gude-MW11A-SO-14 to 16	Initial	10070220-001	1029	S	33515	83560	06/29/2010	07/02/2010	07/09/2010	07/12/2010
	Gude-MW11A-SO-14	MS	10070220-001 S	1029	S	33515	83560	06/29/2010	07/02/2010	07/09/2010	07/12/2010

Analytical Data Package Information Summary for W.O 10070220

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8081B	to 16 S										
	Gude-MW11A-SO-14	MSD	10070220-001 SD	1029	S	33515	83550	06/29/2010	07/02/2010	07/09/2010	07/12/2010
	to 16 SD										
	Gude-MW11B-SO-18	Initial	10070220-002	1029	S	33515	83550	06/30/2010	07/02/2010	07/09/2010	07/12/2010
SW846 8082A	to 20										
	Gude-SO-Dup3	Initial	10070220-003	1029	S	33515	83550	06/30/2010	07/02/2010	07/09/2010	07/12/2010
	33502-1-BKS	BKS	33502-1-BKS	1029	S	33502	83553	-----	07/02/2010	07/08/2010	07/09/2010
	33502-1-BLK	BLK	33502-1-BLK	1029	S	33502	83553	-----	07/02/2010	07/08/2010	07/09/2010
	33502-1-BSD	BSD	33502-1-BSD	1029	S	33502	83553	-----	07/02/2010	07/08/2010	07/09/2010
	Gude-MW10-SO-18 to 20	Initial	10070220-004	1029	S	33502	83553	07/02/2010	07/02/2010	07/08/2010	07/09/2010
	Gude-MW11A-SO-14	Initial	10070220-001	1029	S	33502	83553	06/29/2010	07/02/2010	07/08/2010	07/09/2010
	to 16										
	Gude-MW11A-SO-14	MS	10070220-001 S	1029	S	33502	83553	06/29/2010	07/02/2010	07/08/2010	07/09/2010
	to 16 S										
SW846 8151A	Gude-MW11A-SO-14	MSD	10070220-001 SD	1029	S	33502	83553	06/29/2010	07/02/2010	07/08/2010	07/09/2010
	to 16 SD										
	Gude-MW11B-SO-18	Initial	10070220-002	1029	S	33502	83553	06/29/2010	07/02/2010	07/08/2010	07/09/2010
	Gude-SO-Dup3	Initial	10070220-003	1029	S	33502	83553	06/30/2010	07/02/2010	07/08/2010	07/09/2010
	33537-1-BKS	BKS	33537-1-BKS	1029	S	33537	83635	-----	07/02/2010	07/13/2010	07/14/2010
	33537-1-BLK	BLK	33537-1-BLK	1029	S	33537	83635	-----	07/02/2010	07/13/2010	07/14/2010
	33537-1-BSD	BSD	33537-1-BSD	1029	S	33537	83635	-----	07/02/2010	07/13/2010	07/14/2010
	Gude-MW10-SO-18 to 20	Initial	10070220-004	1029	S	33537	83635	07/02/2010	07/02/2010	07/13/2010	07/14/2010
	Gude-MW11A-SO-14	Initial	10070220-001	1029	S	33537	83635	06/29/2010	07/02/2010	07/13/2010	07/14/2010
	to 16										
	Gude-MW11A-SO-14	MS	10070220-001 S	1029	S	33537	83635	06/29/2010	07/02/2010	07/13/2010	07/14/2010
	to 16 S										
Gude-MW11A-SO-14	MSD	10070220-001 SD	1029	S	33537	83635	06/29/2010	07/02/2010	07/13/2010	07/14/2010	
to 16 SD											
Gude-MW11B-SO-18	Initial	10070220-002	1029	S	33537	83635	06/30/2010	07/02/2010	07/13/2010	07/15/2010	
Gude-SO-Dup3	Initial	10070220-003	1029	S	33537	83635	06/30/2010	07/02/2010	07/13/2010	07/15/2010	

Analytical Data Package Information Summary for W.O 10070220



Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mix	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 9014	Gude-MW11B-SO-18 to 20	Initial	10070220-002	1022	S	83556	83556	06/30/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-MW9-SO-20 to 22 S	MS	10070802-002 S	1022	S	83556	83556	07/06/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-MW9-SO-20 to 22 SD	MSD	10070802-002 SD	1022	S	83556	83556	07/06/2010	07/02/2010	07/12/2010	07/12/2010
	Gude-SO-Dup3	Initial	10070220-003	1022	S	83556	83556	06/30/2010	07/02/2010	07/12/2010	07/12/2010



Blank Summary 10070220

EA Engineering, Sparks, MD

Gude

Sample Id: 33502-1-BLK
Lab Sample Id: 33502-1-BLK

Matrix: SOLID

Analytical Method: SW846 8082A

Prep Method: SW3550

Date Analyzed: Jul-09-10 10:40

Analyst: 1029

Date Prep: Jul-08-10 16:01

Tech: 1016

Seq Number: 83553

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
PCB-1016	12674-11-2	ND	0.1	0.0	mg/kg	U	1
PCB-1221	11104-28-2	ND	0.1	0.0	mg/kg	U	1
PCB-1232	11141-16-5	ND	0.1	0.0	mg/kg	U	1
PCB-1242	53469-21-9	ND	0.1	0.0	mg/kg	U	1
PCB-1248	12672-29-6	ND	0.1	0.0	mg/kg	U	1
PCB-1254	11097-69-1	ND	0.1	0.0	mg/kg	U	1
PCB-1260	11096-82-5	ND	0.1	0.0	mg/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD

Gude

Sample Id: 33507-1-BLK	Matrix: SOLID
Lab Sample Id: 33507-1-BLK	

Analytical Method: SW846 8270C	Prep Method: SW3550		
Date Analyzed: Jul-09-10 15:36	Analyst: 1014	Date Prep: Jul-09-10 09:33	Tech: 1022
Seq Number: 83607			

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Acenaphthene	83-32-9	ND	170	83	ug/kg	U	1
Acenaphthylene	208-96-8	ND	170	83	ug/kg	U	1
Acetophenone	98-86-2	ND	170	83	ug/kg	U	1
Anthracene	120-12-7	ND	170	83	ug/kg	U	1
Benzo(a)anthracene	56-55-3	ND	170	83	ug/kg	U	1
Benzo(a)pyrene	50-32-8	ND	170	83	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	ND	170	83	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	ND	170	83	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	ND	170	83	ug/kg	U	1
Benzyl butyl phthalate	85-68-7	ND	170	83	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	ND	170	83	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	ND	170	83	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	ND	170	83	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	ND	170	83	ug/kg	U	1
4-Bromophenylphenyl ether	101-55-3	ND	170	83	ug/kg	U	1
Di-n-butyl phthalate	84-74-2	ND	330	170	ug/kg	U	1
4-Chloro-3-methylphenol	59-50-7	ND	170	83	ug/kg	U	1
4-Chloroaniline	106-47-8	ND	330	170	ug/kg	U	1
2-Chloronaphthalene	91-58-7	ND	170	83	ug/kg	U	1
2-Chlorophenol	95-57-8	ND	170	83	ug/kg	U	1
4-Chlorophenyl phenyl ether	7005-72-3	ND	170	83	ug/kg	U	1
Chrysene	218-01-9	ND	170	83	ug/kg	U	1
Dibenz(a,h)anthracene	53-70-3	ND	170	83	ug/kg	U	1
Dibenzofuran	132-64-9	ND	170	83	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	ND	170	83	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	ND	170	83	ug/kg	U	1
Diethyl phthalate	84-66-2	ND	170	83	ug/kg	U	1
Dimethyl phthalate	131-11-3	ND	170	83	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	ND	170	83	ug/kg	U	1
4,6-Dinitro-2-methyl phenol	534-52-1	ND	170	83	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	ND	330	170	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	ND	170	83	ug/kg	U	1
2,6-Dinitrotoluene	606-20-2	ND	170	83	ug/kg	U	1
Fluoranthene	206-44-0	ND	170	83	ug/kg	U	1
Fluorene	86-73-7	ND	170	83	ug/kg	U	1
Hexachlorobenzene	118-74-1	ND	170	83	ug/kg	U	1
Hexachlorobutadiene	87-68-3	ND	170	83	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	ND	170	83	ug/kg	U	1
Hexachloroethane	67-72-1	ND	170	83	ug/kg	U	1
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	170	83	ug/kg	U	1
Isophorone	78-59-1	ND	170	83	ug/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD

Gude

Sample Id: 33507-1-BLK Matrix: SOLID
Lab Sample Id: 33507-1-BLK

Analytical Method: SW846 8270C Prep Method: SW3550
Date Analyzed: Jul-09-10 15:36 Analyst: 1014 Date Prep: Jul-09-10 09:33 Tech: 1022
Seq Number: 83607

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2-Methylnaphthalene	91-57-6	ND	170	83	ug/kg	U	1
2-Methylphenol	95-48-7	ND	170	83	ug/kg	U	1
3&4-Methylphenol		ND	170	83	ug/kg	U	1
4-Nitroaniline	100-01-6	ND	170	83	ug/kg	U	1
3-Nitroaniline	99-09-2	ND	170	83	ug/kg	U	1
2-Nitroaniline	88-74-4	ND	330	170	ug/kg	U	1
Nitrobenzene	98-95-3	ND	170	83	ug/kg	U	1
2-Nitrophenol	88-75-5	ND	170	83	ug/kg	U	1
4-Nitrophenol	100-02-7	ND	170	83	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	ND	170	83	ug/kg	U	1
N-Nitrosodi-n-propylamine	621-64-7	ND	170	83	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	ND	170	83	ug/kg	U	1
Di-n-octyl phthalate	117-84-0	ND	170	83	ug/kg	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	170	83	ug/kg	U	1
Pentachlorophenol	87-86-5	ND	330	170	ug/kg	U	1
Phenanthrene	85-01-8	ND	170	83	ug/kg	U	1
Phenol	108-95-2	ND	170	83	ug/kg	U	1
Pyrene	129-00-0	ND	170	83	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	ND	170	83	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	ND	170	83	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	ND	170	83	ug/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD

Gude

Sample Id: 33508-1-BLK

Matrix: SOLID

Lab Sample Id: 33508-1-BLK

Analytical Method: SW846 8260B

Prep Method: SW5030

Date Analyzed: Jul-08-10 11:26

Analyst: 1011

Date Prep: Jul-08-10 09:15

Tech: 1011

Seq Number: 83517

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	ND	5	2.6	ug/kg	U	1
Chloromethane	74-87-3	ND	5	2.6	ug/kg	U	1
Vinyl Chloride	75-01-4	ND	5	2.6	ug/kg	U	1
Bromomethane	74-83-9	ND	5	2.6	ug/kg	U	1
Chloroethane	75-00-3	ND	5	2.6	ug/kg	U	1
Acetone	67-64-1	ND	21	10	ug/kg	U	1
Trichlorofluoromethane	75-69-4	ND	5	2.6	ug/kg	U	1
1,1-Dichloroethene	75-35-4	ND	5	2.6	ug/kg	U	1
Methylene chloride	75-09-2	ND	5	2.6	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	ND	5	2.6	ug/kg	U	1
1,1-Dichloroethane	75-34-3	ND	5	2.6	ug/kg	U	1
Vinyl acetate	108-05-4	ND	5	2.6	ug/kg	U	1
2-Butanone (MEK)	78-93-3	ND	21	10	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	ND	5	2.6	ug/kg	U	1
Bromochloromethane	74-97-5	ND	5	2.6	ug/kg	U	1
Chloroform	67-66-3	ND	5	2.6	ug/kg	U	1
2,2-Dichloropropane	594-20-7	ND	5	2.6	ug/kg	U	1
1,1,1-Trichloroethane	71-55-6	ND	5	2.6	ug/kg	U	1
1,2-Dichloroethane	107-06-2	ND	5	2.6	ug/kg	U	1
1,1-Dichloropropene	563-58-6	ND	5	2.6	ug/kg	U	1
Carbon tetrachloride	56-23-5	ND	5	2.6	ug/kg	U	1
Benzene	71-43-2	ND	5	2.6	ug/kg	U	1
Dibromomethane	74-95-3	ND	5	2.6	ug/kg	U	1
1,2-Dichloropropane	78-87-5	ND	5	2.6	ug/kg	U	1
Carbon Disulfide	75-15-0	ND	10	5.1	ug/kg	U	1
Trichloroethene	79-01-6	ND	5	2.6	ug/kg	U	1
Acrylonitrile	107-13-1	ND	21	10	ug/kg	U	1
Bromodichloromethane	75-27-4	ND	5	2.6	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	5	2.6	ug/kg	U	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ND	21	10	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	ND	5	2.6	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	ND	5	2.6	ug/kg	U	1
Toluene	108-88-3	ND	5	2.6	ug/kg	U	1
1,3-Dichloropropane	142-28-9	ND	5	2.6	ug/kg	U	1
2-Hexanone (MBK)	591-78-6	ND	21	10	ug/kg	U	1
1,2-Dibromoethane	106-93-4	ND	5	2.6	ug/kg	U	1
Dibromochloromethane	124-48-1	ND	5	2.6	ug/kg	U	1
Acrolein	107-02-8	ND	21	10	ug/kg	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	5	2.6	ug/kg	U	1
Bromoform	75-25-2	ND	5	2.6	ug/kg	U	1
trans-1,4-dichloro-2-butene	110-57-6	ND	5	2.6	ug/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD

Gude

Sample Id: 33508-1-BLK	Matrix: SOLID
Lab Sample Id: 33508-1-BLK	

Analytical Method: SW846 8260B		Prep Method: SW5030					
Date Analyzed: Jul-08-10 11:26	Analyst: 1011	Date Prep: Jul-08-10 09:15	Tech: 1011				
	Seq Number: 83517						
Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Tetrachloroethene	127-18-4	ND	5	2.6	ug/kg	U	1
Chlorobenzene	108-90-7	ND	5	2.6	ug/kg	U	1
Ethylbenzene	100-41-4	ND	5	2.6	ug/kg	U	1
m&p-Xylene	108-38-3	ND	10	5.1	ug/kg	U	1
Styrene	100-42-5	ND	5	2.6	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	2.6	ug/kg	U	1
o-Xylene	95-47-6	ND	5	2.6	ug/kg	U	1
1,2,3-Trichloropropane	96-18-4	ND	5	2.6	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	ND	5	2.6	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	ND	5	2.6	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	ND	5	2.6	ug/kg	U	1
1,2-Dibromo-3-chloropropane	96-12-8	ND	41	21	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	5	2.6	ug/kg	U	1
Iodomethane	74-88-4	ND	21	10	ug/kg	U	1
Naphthalene	91-20-3	ND	5	2.6	ug/kg	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	5	2.6	ug/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD
Gude

Sample Id: 33515-1-BLK
Lab Sample Id: 33515-1-BLK

Matrix: SOLID

Analytical Method: SW846 8081B

Prep Method: SW3550

Date Analyzed: Jul-12-10 14:51

Analyst: 1029

Date Prep: Jul-09-10 16:41

Tech: 1016

Seq Number: 83560

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
alpha-BHC	319-84-6	ND	20	9.9	ug/kg	U	1
gamma-BHC (Lindane)	58-89-9	ND	20	9.9	ug/kg	U	1
beta-BHC	319-85-7	ND	20	9.9	ug/kg	U	1
delta-BHC	319-86-8	ND	20	9.9	ug/kg	U	1
Heptachlor	76-44-8	ND	20	9.9	ug/kg	U	1
Aldrin	309-00-2	ND	20	9.9	ug/kg	U	1
Heptachlor epoxide	1024-57-3	ND	20	9.9	ug/kg	U	1
gamma-Chlordane	5103-74-2	ND	20	9.9	ug/kg	U	1
alpha-Chlordane	5103-71-9	ND	20	9.9	ug/kg	U	1
4,4-DDE	72-55-9	ND	20	9.9	ug/kg	U	1
Endosulfan I	959-98-8	ND	20	9.9	ug/kg	U	1
Dieldrin	60-57-1	ND	20	9.9	ug/kg	U	1
Endrin	72-20-8	ND	20	9.9	ug/kg	U	1
4,4-DDD	72-54-8	ND	20	9.9	ug/kg	U	1
Endosulfan II	33213-65-9	ND	20	9.9	ug/kg	U	1
4,4-DDT	50-29-3	ND	20	9.9	ug/kg	U	1
Endrin aldehyde	7421-93-4	ND	20	9.9	ug/kg	U	1
Methoxychlor	72-43-5	ND	20	9.9	ug/kg	U	1
Endosulfan sulfate	1031-07-8	ND	20	9.9	ug/kg	U	1
Endrin ketone	53494-70-5	ND	20	9.9	ug/kg	U	1
Toxaphene	8001-35-2	ND	200	99	ug/kg	U	1
Chlordane	57-74-9	ND	200	99	ug/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD
Gude

Matrix: **SOLID**

Sample Id: **33537-1-BLK**
Lab Sample Id: **33537-1-BLK**

Prep Method: **SW8151A PREP**

Analytical Method: **SW846 8151A**

Date Analyzed: Jul-14-10 16:59

Analyst: 1029
Seq Number: 83635

Date Prep: Jul-13-10 06:43

Tech: 1028

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2,4-D	94-75-7	ND	200	100	ug/kg	U	1
2,4,5-IP (Silvex)	93-72-1	ND	20	10	ug/kg	U	1
2,4,5-I	93-76-5	ND	20	10	ug/kg	U	1
Dinoseb	88-85-7	ND	100	50	ug/kg	U	1



Blank Summary 10070220

EA Engineering, Sparks, MD
Gude

Sample Id: **83556-1-BLK** Matrix: **SOLID**
Lab Sample Id: **83556-1-BLK**

Analytical Method: **SW846 9014** Prep Method:
Date Analyzed: Jul-12-10 16:30 Analyst: 1022 Date Prep: Tech: 1022
Seq Number: 83556

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Cyanide, Total	57-12-5	ND	2.5	1.3	mg/kg	U	1



Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83560

Sample: 10070220-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	21.2	25.00	85	32-133	

Lab Batch #: 83560

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	21.4	25.00	85	32-133	

Lab Batch #: 83560

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.1	25.00	100	55-143	
Tetrachloro-m-xylene	24.1	25.00	96	32-133	

Lab Batch #: 83560

Sample: 10070220-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.8	25.00	107	55-143	
Tetrachloro-m-xylene	19.8	25.00	79	32-133	

Lab Batch #: 83560

Sample: 10070220-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	19.4	25.00	78	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83560

Sample: 10070220-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.5	25.00	102	55-143	
Tetrachloro-m-xylene	20.6	25.00	82	32-133	

Lab Batch #: 83560

Sample: 33515-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.9	25.00	100	55-143	
Tetrachloro-m-xylene	24.3	25.00	97	32-133	

Lab Batch #: 83560

Sample: 33515-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.4	25.00	106	55-143	
Tetrachloro-m-xylene	25.7	25.00	103	32-133	

Lab Batch #: 83560

Sample: 33515-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	26.6	25.00	106	55-143	
Tetrachloro-m-xylene	24.8	25.00	99	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83553

Sample: 10070220-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	20.2	25.00	81	43-124	
Tetrachloro-m-xylene	16.9	25.00	68	44-97	

Lab Batch #: 83553

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	22.9	25.00	92	43-124	
Tetrachloro-m-xylene	16.4	25.00	66	44-97	

Lab Batch #: 83553

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	19.9	25.00	80	43-124	
Tetrachloro-m-xylene	15.0	25.00	60	44-97	

Lab Batch #: 83553

Sample: 10070220-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	21.2	25.00	85	43-124	
Tetrachloro-m-xylene	15.5	25.00	62	44-97	

Lab Batch #: 83553

Sample: 10070220-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	23.9	25.00	95	43-124	
Tetrachloro-m-xylene	17.4	25.00	69	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83553

Sample: 10070220-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	23.8	25.00	95	43-124	
Tetrachloro-m-xylene	17.6	25.00	70	44-97	

Lab Batch #: 83553

Sample: 33502-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	18.7	25.00	75	43-124	
Tetrachloro-m-xylene	17.9	25.00	72	44-97	

Lab Batch #: 83553

Sample: 33502-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	20.5	25.00	82	43-124	
Tetrachloro-m-xylene	19.4	25.00	77	44-97	

Lab Batch #: 83553

Sample: 33502-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	20.8	25.00	83	43-124	
Tetrachloro-m-xylene	18.4	25.00	74	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83635

Sample: 10070220-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	52.3	50.00	105	40-165	

Lab Batch #: 83635

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	47.5	50.00	95	40-165	

Lab Batch #: 83635

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	49.6	50.00	99	40-165	

Lab Batch #: 83635

Sample: 10070220-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	52.5	50.00	105	40-165	

Lab Batch #: 83635

Sample: 10070220-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Chlorinated Herbicides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2,4-Dichlorophenylacetic Acid	47.5	50.00	95	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83635

Sample: 10070220-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	45.9	50.00	92	40-165	

Lab Batch #: 83635

Sample: 33537-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	51.9	50.00	104	40-165	

Lab Batch #: 83635

Sample: 33537-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	43.5	50.00	87	40-165	

Lab Batch #: 83635

Sample: 33537-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	56.2	50.00	112	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83517

Sample: 10070220-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	52.4	50.00	105	90-113	
Toluene-D8	49.7	50.00	99	90-108	
4-Bromofluorobenzene	54.0	50.00	108	79-125	

Lab Batch #: 83517

Sample: 10070220-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	52.2	50.00	104	90-113	
Toluene-D8	49.7	50.00	99	90-108	
4-Bromofluorobenzene	53.6	50.00	107	79-125	

Lab Batch #: 83517

Sample: 10070220-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	52.6	50.00	105	90-113	
Toluene-D8	49.8	50.00	100	90-108	
4-Bromofluorobenzene	52.8	50.00	106	79-125	

Lab Batch #: 83517

Sample: 10070220-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	51.8	50.00	104	90-113	
Toluene-D8	49.8	50.00	100	90-108	
4-Bromofluorobenzene	52.5	50.00	105	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83517

Sample: 10070803-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.5	50.00	103	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	55.7	50.00	111	79-125	

Lab Batch #: 83517

Sample: 10070803-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.6	50.00	103	90-113	
Toluene-D8	50.1	50.00	100	90-108	
4-Bromofluorobenzene	55.3	50.00	111	79-125	

Lab Batch #: 83517

Sample: 33508-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.5	50.00	101	90-113	
Toluene-D8	50.1	50.00	100	90-108	
4-Bromofluorobenzene	54.7	50.00	109	79-125	

Lab Batch #: 83517

Sample: 33508-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.0	50.00	102	90-113	
Toluene-D8	49.8	50.00	100	90-108	
4-Bromofluorobenzene	52.5	50.00	105	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83517

Sample: 33508-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Dibromofluoromethane	51.6	50.00	103	90-113	
Toluene-D8	49.7	50.00	99	90-108	
4-Bromofluorobenzene	54.0	50.00	108	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83607

Sample: 10070220-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2800	3330	84	48-112	
2-Fluorophenol	4770	6660	72	45-107	
Nitrobenzene-d5	2680	3330	80	44-98	
Phenol-d6	5340	6660	80	38-100	
Terphenyl-D14	3200	3330	96	34-165	
2,4,6-Tribromophenol	5800	6660	87	44-104	

Lab Batch #: 83607

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2690	3320	81	48-112	
2-Fluorophenol	4540	6650	68	45-107	
Nitrobenzene-d5	2500	3320	75	44-98	
Phenol-d6	5030	6650	76	38-100	
Terphenyl-D14	3190	3320	96	34-165	
2,4,6-Tribromophenol	5740	6650	86	44-104	

Lab Batch #: 83607

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2790	3330	84	48-112	
2-Fluorophenol	4740	6650	71	45-107	
Nitrobenzene-d5	2550	3330	77	44-98	
Phenol-d6	5190	6650	78	38-100	
Terphenyl-D14	3120	3330	94	34-165	
2,4,6-Tribromophenol	5410	6650	81	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83607

Sample: 10070220-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3020	3320	91	48-112	
2-Fluorophenol	4520	6650	68	45-107	
Nitrobenzene-d5	2820	3320	85	44-98	
Phenol-d6	5710	6650	86	38-100	
Terphenyl-D14	3460	3320	104	34-165	
2,4,6-Tribromophenol	6290	6650	95	44-104	

Lab Batch #: 83607

Sample: 10070220-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2820	3320	85	48-112	
2-Fluorophenol	4140	6640	62	45-107	
Nitrobenzene-d5	2590	3320	78	44-98	
Phenol-d6	5260	6640	79	38-100	
Terphenyl-D14	3160	3320	95	34-165	
2,4,6-Tribromophenol	6140	6640	93	44-104	

Lab Batch #: 83607

Sample: 10070220-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	3010	3330	91	48-112	
2-Fluorophenol	4580	6650	69	45-107	
Nitrobenzene-d5	2820	3330	85	44-98	
Phenol-d6	5720	6650	86	38-100	
Terphenyl-D14	3250	3330	98	34-165	
2,4,6-Tribromophenol	6340	6650	95	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

08/23/2010

Work Order #: 10070220

Project ID: N/A

Lab Batch #: 83607

Sample: 33507-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2810	3330	85	48-112	
2-Fluorophenol	5240	6650	79	45-107	
Nitrobenzene-d5	2650	3330	80	44-98	
Phenol-d6	5380	6650	81	38-100	
Terphenyl-D14	3190	3330	96	34-165	
2,4,6-Tribromophenol	5390	6650	81	44-104	

Lab Batch #: 83607

Sample: 33507-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2850	3330	85	48-112	
2-Fluorophenol	5380	6660	81	45-107	
Nitrobenzene-d5	2830	3330	85	44-98	
Phenol-d6	5490	6660	82	38-100	
Terphenyl-D14	3130	3330	94	34-165	
2,4,6-Tribromophenol	5420	6660	81	44-104	

Lab Batch #: 83607

Sample: 33507-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2780	3320	84	48-112	
2-Fluorophenol	5040	6650	76	45-107	
Nitrobenzene-d5	2610	3320	79	44-98	
Phenol-d6	5230	6650	79	38-100	
Terphenyl-D14	3020	3320	91	34-165	
2,4,6-Tribromophenol	5350	6650	80	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Blank Spike Recovery

Project Name: Gude

Work Order #: 10070220

Project ID: N/A

Prep Batch #: 33518

Date Prepared: 07/12/2010

Sample ID: 33518-1-BKS

Matrix: Solid

Lab Batch ID 83559

Date Analyzed: 07/12/2010

Analyst: 1034

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1 250	20 00	20 44	102	75-125	
Arsenic	<0 2500	20 00	20 57	103	75-125	
Barium	<1 250	20 00	21 05	105	75-125	
Beryllium	<1 250	20 00	18 77	94	75-125	
Cadmium	<1 250	20 00	20 37	102	75-125	
Chromium	<1 250	20 00	21 87	109	75-125	
Cobalt	<1 250	20 00	20 67	103	75-125	
Copper	<1 250	20 00	21 85	109	75-125	
Lead	<1 250	20 00	21 97	110	75-125	
Mercury	<0 0500	0 5000	0 5700	114	75-125	
Nickel	<1 250	20 00	20 63	103	75-125	
Selenium	<1 250	20 00	18 18	91	75-125	
Silver	<1 250	20 00	20 84	104	75-125	
Thallium	<1 000	20 00	22 00	110	75-125	
Tin	<2 500	20 00	20 05	100	75-125	
Vanadium	<1 250	20 00	21 39	107	75-125	
Zinc	<5 000	20 00	16 27	81	75-125	

Blank Spike Recovery [D] = $100 * (([C] - [A]) / [B])$

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H= Recovery of BS,BSD or both exceeded the laboratory control limits

F = RPD exceeded the laboratory control limits

L = Recovery of BS,BSD or both below the laboratory control limits



Blank Spike Recovery

Project Name: Gude

Work Order #: 10070220

Project ID: N/A

Prep Batch #: 33518

Date Prepared: 07/12/2010

Sample ID: 33518-1-BKS

Matrix: Solid

Lab Batch ID 83620

Date Analyzed: 07/14/2010

Analyst: 1034

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1 250	20 00	22 75	114	75-125	
Arsenic	<0 2500	20 00	22 62	113	75-125	
Barium	<1 250	20 00	22 09	110	75-125	
Beryllium	<1 250	20 00	14 62	73	75-125	L
Cadmium	<1 250	20 00	21 90	110	75-125	
Chromium	<1 250	20 00	22 26	111	75-125	
Cobalt	<1 250	20 00	25 67	128	75-125	H
Copper	<1 250	20 00	22 70	114	75-125	
Lead	<1 250	20 00	22 18	111	75-125	
Mercury	<0 0500	0 5000	0 5600	112	75-125	
Nickel	<1 250	20 00	23 56	118	75-125	
Selenium	<1 250	20 00	20 90	105	75-125	
Silver	<1 250	20 00	22 27	111	75-125	
Thallium	<1 000	20 00	21 91	110	75-125	
Tin	<2 500	20 00	22 52	113	75-125	
Vanadium	<1 250	20 00	23 10	116	75-125	
Zinc	<5 000	20 00	22 38	112	75-125	

Blank Spike Recovery [D] = $100 * (([C] - [A]) / [B])$

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H= Recovery of BS,BSD or both exceeded the laboratory control limits

F = RPD exceeded the laboratory control limits

L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83560

Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/12/2010

Sample: 33515-1-BKS

Method: SW3550 / SW8081B

Project ID: N/A

Analyst: 1029

Matrix: Solid

Organochlorine Pesticides Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<9.881	19.78	21.60	109	19.78	22.49	114	4	80-126	25	
gamma-BHC (Lindane)	<9.881	19.78	21.34	108	19.78	22.35	113	5	81-124	25	
beta-BHC	<9.881	19.78	20.06	101	19.78	21.03	107	6	77-121	25	
delta-BHC	<9.881	19.78	23.35	118	19.78	24.77	126	7	75-126	25	
Heptachlor	<9.881	19.78	20.77	105	19.78	21.69	110	5	76-120	25	
Aldrin	<9.881	19.78	21.97	111	19.78	22.83	116	4	81-122	25	
Heptachlor epoxide	<9.881	19.78	21.25	107	19.78	22.10	112	5	81-123	25	
gamma-Chlordane	<9.881	19.78	22.68	115	19.78	23.66	120	4	89-135	25	
alpha-Chlordane	<9.881	19.78	23.08	117	19.78	24.11	122	4	82-121	25	H
4,4-DDE	<9.881	19.78	20.65	104	19.78	21.94	111	7	78-138	25	
Endosulfan I	<9.881	19.78	22.93	116	19.78	23.87	121	4	82-123	25	
Dieldrin	<9.881	19.78	23.63	119	19.78	24.77	126	6	81-126	25	
Endrin	<9.881	19.78	22.75	115	19.78	23.92	121	5	70-131	25	
4,4-DDD	<9.881	19.78	22.27	113	19.78	23.82	121	7	68-143	25	
Endosulfan II	<9.881	19.78	22.30	113	19.78	23.53	119	5	80-133	25	
4,4-DDT	<9.881	19.78	22.05	111	19.78	23.80	121	9	68-129	25	
Endrin aldehyde	<9.881	19.78	23.12	117	19.78	24.76	126	7	77-127	25	
Methoxychlor	<9.881	19.78	19.54	99	19.78	20.99	107	8	67-121	25	
Endosulfan sulfate	<9.881	19.78	22.72	115	19.78	24.11	122	6	79-126	25	
Endrin ketone	<9.881	19.78	22.67	115	19.78	24.14	123	7	82-137	25	

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Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/(B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/(E)$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83553

Units: mg/kg

Date Prepared: 07/08/2010

Date Analyzed: 07/09/2010

Project ID: N/A

Analyst: 1029

Matrix: Solid

Sample: 33502-1-BKS

Method: SW3550 / SW8082

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	PCB-1016	<0.0495	0.4931	0.4310	87	0.4931	0.4167	84	4	59-123	25
PCB-1260	<0.0495	0.4931	0.4727	96	0.4931	0.4716	95	1	54-152	25	

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Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83635

Units: ug/kg

Date Prepared: 07/13/2010

Date Analyzed: 07/14/2010

Sample: 33537-1-BKS

Method: SW8151A_PREP / SW8151

Project ID: N/A

Analyst: 1029

Matrix: Solid

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<99.70	994	821.8	83	994	924	93	11	65-110	30	
2,4,5-TP (Silvex)	<9.970	99.40	82.50	83	99.40	93.08	94	12	58-130	30	
2,4,5-T	<9.970	99.40	97.71	98	99.40	112.7	114	15	81-130	30	
Dinoseb	<49.85	497	383.6	77	497	413.4	84	9	62-102	30	

Relative Percent Difference $RPD = 200 * |(D-F)/(D+F)|$
 Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/[E]$

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H= Recovery of BS, BSD or both exceeded the laboratory control limits
 F = RPD exceeded the laboratory control limits
 L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83517

Units: ug/kg

Date Prepared: 07/08/2010

Date Analyzed: 07/08/2010

Sample: 33508-1-BKS

Method: SW5030 / SW8260B

Project ID: N/A

Analyst: 1011

Matrix: Solid

Volatile Organic Compounds Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Dichlorodifluoromethane	<2.572	61.73	54.16	88	61.73	59.64	96	9	55-125	30	
Chloromethane	<2.572	61.73	55.61	90	61.73	62.55	101	12	62-125	30	
Vinyl Chloride	<2.572	61.73	57.18	93	61.73	66.95	108	15	65-130	30	
Bromomethane	<2.572	61.73	53.95	87	61.73	60.86	98	12	59-131	30	
Chloroethane	<2.572	61.73	60.74	98	61.73	69.38	112	13	57-135	30	
Acetone	<10.29	61.73	66.51	108	61.73	75.79	123	13	7-180	30	
Trichlorofluoromethane	<2.572	61.73	60.52	98	61.73	69.39	112	13	55-133	30	
1,1-Dichloroethene	<2.572	61.73	51.91	84	61.73	56.64	92	9	60-122	30	
Methylene chloride	<2.572	61.73	51.34	83	61.73	60.37	98	17	63-125	30	
trans-1,2-Dichloroethene	<2.572	61.73	56.93	92	61.73	60.10	97	5	62-129	30	
1,1-Dichloroethane	<2.572	61.73	53.12	86	61.73	60.18	97	12	55-135	30	
Vinyl acetate	<2.572	61.73	68.72	111	61.73	77.22	125	12	57-136	30	
2-Butanone (MEK)	<10.29	61.73	63.38	103	61.73	71.69	116	12	36-201	30	
cis-1,2-Dichloroethene	<2.572	61.73	54.05	88	61.73	57.76	93	6	60-127	30	
Bromochloromethane	<2.572	61.73	53.49	87	61.73	58.43	94	8	66-127	30	
Chloroform	<2.572	61.73	53.88	87	61.73	58.71	95	9	64-113	30	
2,2-Dichloropropane	<2.572	61.73	53.01	86	61.73	58.12	94	9	53-129	30	
1,1,1-Trichloroethane	<2.572	61.73	54.56	88	61.73	58.29	94	7	57-127	30	
1,2-Dichloroethane	<2.572	61.73	57.74	94	61.73	65.09	105	11	62-124	30	
1,1-Dichloropropene	<2.572	61.73	54.43	88	61.73	59.88	97	10	61-122	30	

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Relative Percent Difference RPD = $200 * |(D-F)/(D+F)|$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F)/[E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Guide

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83517

Units: ug/kg

Project ID: N/A

Analyst: 1011

Matrix: Solid

Sample: 33508-1-BKS

Date Prepared: 07/08/2010

Date Analyzed: 07/08/2010

Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon tetrachloride	<2.572	61.73	53.27	86	61.73	57.42	93	8	55-131	30	
Benzene	<2.572	61.73	53.27	86	61.73	58.90	95	10	64-114	30	
Dibromomethane	<2.572	61.73	58.43	95	61.73	64.30	104	9	64-132	30	
1,2-Dichloropropane	<2.572	61.73	55.48	90	61.73	61.90	100	11	61-117	30	
Carbon Disulfide	<5.144	61.73	55.92	91	61.73	65.03	105	14	37-161	30	
Trichloroethene	<2.572	61.73	54.32	88	61.73	58.66	95	8	62-121	30	
Acrylonitrile	<10.29	61.73	70.81	115	61.73	81.61	132	14	59-168	30	
Bromodichloromethane	<2.572	61.73	54.38	88	61.73	60.07	97	10	62-126	30	
cis-1,3-Dichloropropene	<2.572	61.73	55.82	90	61.73	61.48	99	10	59-119	30	
4-Methyl-2-Pentanone (MIBK)	<10.29	61.73	67.83	110	61.73	70.84	115	4	59-148	30	
trans-1,3-Dichloropropene	<2.572	61.73	56.07	91	61.73	62.11	100	9	51-126	30	
1,1,2-Trichloroethane	<2.572	61.73	56.97	92	61.73	63.79	103	11	60-134	30	
Toluene	<2.572	61.73	54.09	88	61.73	58.45	94	7	64-117	30	
1,3-Dichloropropane	<2.572	61.73	57.08	92	61.73	62.84	102	10	61-129	30	
2-Hexanone (MBK)	<10.29	61.73	66.54	108	61.73	73.22	118	9	9-176	30	
1,2-Dibromoethane	<2.572	61.73	59.18	96	61.73	64.47	104	8	65-135	30	
Dibromochloromethane	<2.572	61.73	54.89	89	61.73	60.30	97	9	67-126	30	
Acrolein	<10.29	61.73	72.34	117	61.73	83.22	135	14	52-168	30	
1,1,1,2-Tetrachloroethane	<2.572	61.73	51.82	84	61.73	56.65	92	9	64-121	30	
Bromoform	<2.572	61.73	47.37	77	61.73	52.57	85	10	62-120	30	

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Relative Percent Difference $RPD = 200 * [(D-F)/(D+F)]$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/(B)$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/(E)$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83517

Units: ug/kg

Date Prepared: 07/08/2010

Date Analyzed: 07/08/2010

Sample: 33508-1-BKS

Project ID: N/A

Analyst: 1011

Matrix: Solid

Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
trans-1,4-dichloro-2-butene	<2.572	61.73	65.40	106	61.73	74.53	120	12	43-133	30	
Tetrachloroethene	<2.572	61.73	52.35	85	61.73	57.09	92	8	58-129	30	
Chlorobenzene	<2.572	61.73	52.81	86	61.73	57.06	92	7	64-116	30	
Ethylbenzene	<2.572	61.73	55.16	89	61.73	58.87	95	7	61-118	30	
m&p-Xylene	<5.144	123.5	109.1	88	123.5	116.5	94	7	63-116	30	
Styrene	<2.572	61.73	54.29	88	61.73	57.93	94	7	60-112	30	
1,1,2,2-Tetrachloroethane	<2.572	61.73	63.22	102	61.73	70.19	113	10	58-144	30	
o-Xylene	<2.572	61.73	54.70	89	61.73	58.64	95	7	65-117	30	
1,2,3-Trichloropropane	<2.572	61.73	60.13	97	61.73	67.85	110	13	59-139	30	
1,3-Dichlorobenzene	<2.572	61.73	54.51	88	61.73	58.27	94	7	58-123	30	
1,4-Dichlorobenzene	<2.572	61.73	53.60	87	61.73	57.80	93	7	58-121	30	
1,2-Dichlorobenzene	<2.572	61.73	54.77	89	61.73	59.35	96	8	59-124	30	
1,2-Dibromo-3-chloropropane	<20.58	61.73	70.04	113	61.73	76.89	124	9	57-144	30	
1,2,4-Trichlorobenzene	<2.572	61.73	57.38	93	61.73	60.99	99	6	46-122	30	
Iodomethane	<10.29	61.73	57.64	93	61.73	65.72	106	13	46-137	30	
Naphthalene	<2.572	61.73	63.43	103	61.73	69.68	113	9	54-164	30	
1,2,3-Trichlorobenzene	<2.572	61.73	56.52	92	61.73	60.78	98	6	48-126	30	

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Relative Percent Difference $RPD = 200 * |(D-F)/(D+F)|$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/[B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/[E]$

H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Guide

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83607

Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Sample: 33507-1-BKS

Method: SW3550 / SW8270C

Project ID: N/A

Analyst: 1014

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Semivolatle Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<83.31	1331	1293	97	1331	1248	94	3	63-120	30	
Acenaphthylene	<83.31	1331	1312	99	1331	1260	95	4	59-125	30	
Acetophenone	<83.31	1331	1325	100	1331	1278	96	4	57-122	30	
Anthracene	<83.31	1331	1268	95	1331	1209	91	4	63-121	30	
Benzo(a)anthracene	<83.31	1331	1335	100	1331	1257	95	5	61-130	30	
Benzo(a)pyrene	<83.31	1331	1415	106	1331	1357	102	4	58-141	30	
Benzo(b)fluoranthene	<83.31	1331	1492	112	1331	1406	106	6	59-140	30	
Benzo(g,h,i)perylene	<83.31	1331	1476	111	1331	1421	107	4	32-158	30	
Benzo(k)fluoranthene	<83.31	1331	1406	106	1331	1319	99	7	55-137	30	
Benzyl butyl phthalate	<83.31	1331	1522	114	1331	1374	103	10	57-132	30	
bis(2-chloroethoxy) methane	<83.31	1331	1250	94	1331	1197	90	4	61-123	30	
bis(2-chloroethyl) ether	<83.31	1331	1319	99	1331	1267	95	4	55-127	30	
bis(2-chloroisopropyl) ether	<83.31	1331	1260	95	1331	1210	91	4	42-128	30	
bis(2-ethylhexyl) phthalate	<83.31	1331	1465	110	1331	1328	100	10	52-142	30	
4-Bromophenylphenyl ether	<83.31	1331	1297	97	1331	1241	93	4	66-138	30	
Di-n-butyl phthalate	<166.6	1331	1390	104	1331	1328	100	4	54-126	30	
4-Chloro-3-methylphenol	<83.31	1331	1291	97	1331	1240	93	4	63-125	30	
4-Chloroaniline	<166.6	1331	1268	95	1331	1196	90	5	64-118	30	
2-Chloronaphthalene	<83.31	1331	1476	111	1331	1423	107	4	62-117	30	
2-Chlorophenol	<83.31	1331	1301	98	1331	1249	94	4	57-128	30	

Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
 Laboratory Control Sample (LCS) Percent Recovery $IDJ = 100 * (C) / [B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[GI] = 100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
 F = RPD exceeded the laboratory control limits
 L = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Guide

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83607

Units: ug/kg

Sample: 33507-1-BKS

Project ID: N/A
Analyst: 1014
Matrix: Solid

Date Prepared: 07/09/2010
Date Analyzed: 07/09/2010

Semivolatle Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
4-Chlorophenyl phenyl ether	<83.31	1331	1462	110	1331	1395	105	5	65-129	30	
Chrysene	<83.31	1331	1323	99	1331	1263	95	4	62-127	30	
Dibenz(a,h)anthracene	<83.31	1331	1463	110	1331	1410	106	4	43-148	30	
Dibenzofuran	<83.31	1331	1268	95	1331	1233	93	2	63-120	30	
3,3-Dichlorobenzidine	<83.31	1331	1087	82	1331	1014	76	8	32-138	30	
2,4-Dichlorophenol	<83.31	1331	1312	99	1331	1261	95	4	65-127	30	
Diethyl pthalate	<83.31	1331	1390	104	1331	1320	99	5	58-124	30	
Dimethyl pthalate	<83.31	1331	1318	99	1331	1268	95	4	55-125	30	
2,4-Dimethylphenol	<83.31	1331	1249	94	1331	1191	90	4	65-124	30	
4,6-Dinitro-2-methyl phenol	<83.31	1331	1449	109	1331	1371	103	6	26-167	30	
2,4-Dinitrophenol	<166.6	1331	1279	96	1331	1217	92	4	18-177	30	
2,4-Dinitrotoluene	<83.31	1331	1329	100	1331	1255	94	6	60-134	30	
2,6-Dinitrotoluene	<83.31	1331	1377	103	1331	1317	99	4	63-136	30	
Fluoranthene	<83.31	1331	1346	101	1331	1266	95	6	54-127	30	
Fluorene	<83.31	1331	1455	109	1331	1381	104	5	64-119	30	
Hexachlorobenzene	<83.31	1331	1373	103	1331	1296	98	5	58-124	30	
Hexachlorobutadiene	<83.31	1331	1276	96	1331	1246	94	2	64-128	30	
Hexachlorocyclopentadiene	<83.31	1331	1323	99	1331	1271	96	3	26-152	30	
Hexachloroethane	<83.31	1331	1270	95	1331	1235	93	2	55-125	30	
Indeno(1,2,3-c,d)pyrene	<83.31	1331	1490	112	1331	1432	108	4	38-150	30	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicates (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83607

Units: ug/kg

Sample: 33507-1-BKS

Project ID: N/A
Analyst: 1014
Matrix: Solid

Date Prepared: 07/09/2010
Date Analyzed: 07/09/2010

Semivolatle Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Isophorone	<83.31	1331	1207	91	1331	1155	87	4	56-120	30	
2-Methylnaphthalene	<83.31	1331	1279	96	1331	1245	94	2	63-120	30	
2-Methylphenol	<83.31	1331	1274	96	1331	1212	91	5	57-121	30	
3&4-Methylphenol	<83.31	1331	1288	97	1331	1242	93	4	49-123	30	
4-Nitroaniline	<83.31	1331	1215	91	1331	1103	83	9	53-128	30	
3-Nitroaniline	<83.31	1331	1320	99	1331	1241	93	6	53-132	30	
2-Nitroaniline	<166.6	1331	1266	95	1331	1200	90	5	54-131	30	
Nitrobenzene	<83.31	1331	1213	91	1331	1156	87	4	53-119	30	
2-Nitrophenol	<83.31	1331	1297	97	1331	1233	93	4	65-137	30	
4-Nitrophenol	<83.31	1331	1279	96	1331	1202	90	6	50-123	30	
N-Nitrosodimethylamine	<83.31	1331	862.9	65	1331	747.5	56	15	62-123	30	L
N-Nitrosodi-n-propylamine	<83.31	1331	1310	98	1331	1257	95	3	46-121	30	
N-Nitrosodiphenylamine	<83.31	1331	1506	113	1331	1445	109	4	56-129	30	
Di-n-octyl phthalate	<83.31	1331	1579	119	1331	1397	105	13	38-144	30	
1,2,4,5-Tetrachlorobenzene	<83.31	1331	1298	98	1331	1257	95	3	64-127	30	
Pentachlorophenol	<166.6	1331	1350	101	1331	1300	98	3	46-134	30	
Phenanthrene	<83.31	1331	1267	95	1331	1217	92	3	61-119	30	
Phenol	<83.31	1331	1168	88	1331	1108	83	6	47-108	30	
Pyrene	<83.31	1331	1505	113	1331	1382	104	8	54-141	30	
2,3,4,6-Tetrachlorophenol	<83.31	1331	1457	109	1331	1392	105	4	56-130	30	

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Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

H= Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83607

Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Sample: 33507-1-BKS

Project ID: N/A

Analyst: 1014

Matrix: Solid

Semivolatle Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4,6-Trichlorophenol	<83.31	1331	1384	104	1331	1320	99	5	67-127	30	
2,4,5-Trichlorophenol	<83.31	1331	1345	101	1331	1253	94	7	69-132	30	

Relative Percent Difference $RPD = 200 * |(D-F)/(D+F)|$
 Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/[E]$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
 F = RPD exceeded the laboratory control limits
 L = Recovery of BS,BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 1

Lab Batch ID: 83556

Units: mg/kg

Date Prepared: 07/12/2010

Date Analyzed: 07/12/2010

Sample: 83556-1-BKS

Method: / SW9014

Project ID: N/A

Analyst: 1022

Matrix: Solid

Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Cyanide, Total	<1.250	5.000	4.740	95	5.000	4.580	92	3	80-120	20	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33537

Lab Batch ID: 83635

Reporting Units: ug/kg

Date Prepared: 07/13/2010

Date Analyzed: 07/14/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S

Sample ID: 10070220-001 S

Method: SW8151A_PREP /SW8151A

Project ID: N/A

Analyst: 1029

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<12.03	1196	875.4	73	911.6	77	5	57-117	30	
2,4,5-TP (Silvex)	<12.03	119.6	93.38	78	100.1	84	7	59-126	30	
2,4,5-T	<12.03	119.6	110.5	92	115.4	97	5	66-144	30	
Dinoseb	<60.13	597.8	460.3	77	489.7	82	6	63-106	30	

Date Prepared: 07/12/2010

Date Analyzed: 07/12/2010

Client Sample Id: Gude-MW9-SO-20 to 22 S

Sample ID: 10070802-002 S

Method: /SW9014

Analyst: 1022

Matrix: Soil

Prep Batch #: 83556

Lab Batch ID: 83556

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Cyanide Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Cyanide, Total	<1.506	6.024	5.325	88	5.325	88	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33515

Lab Batch ID: 83560

Reporting Units: ug/kg

Date Prepared: 07/09/2010
Date Analyzed: 07/12/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S
Sample ID: 10070220-001 S
Method: SW3550 /SW8081B

Project ID: N/A
Analyst: 1029
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<11.91	23.89	23.89	100	23.96	24.51	102	2	70-130	30	
gamma-BHC (Lindane)	<11.91	23.89	24.13	101	23.96	24.64	103	2	72-128	30	
beta-BHC	<11.91	23.89	23.27	97	23.96	23.19	97	0	74-121	30	
delta-BHC	<11.91	23.89	26.68	112	23.96	26.37	110	2	72-127	30	
Heptachlor	<11.91	23.89	23.43	98	23.96	24.38	102	4	66-127	30	
Aldrin	<11.91	23.89	24.75	104	23.96	25.24	105	1	71-130	30	
Heptachlor epoxide	<11.91	23.89	24.38	102	23.96	24.39	102	0	73-128	30	
gamma-Chlordane	<11.91	23.89	26.65	112	23.96	25.92	108	4	73-133	30	
alpha-Chlordane	<11.91	23.89	26.55	111	23.96	26.12	109	2	62-144	30	
4,4-DDE	<11.91	23.89	24.13	101	23.96	23.77	99	2	78-143	30	
Endosulfan I	<11.91	23.89	26.00	109	23.96	25.77	108	1	73-129	30	
Dieldrin	<11.91	23.89	27.35	114	23.96	26.97	113	1	72-136	30	
Endrin	<11.91	23.89	28.87	121	23.96	31.04	130	7	82-131	30	
4,4-DDD	<11.91	23.89	25.78	108	23.96	24.86	104	4	70-143	30	
Endosulfan II	<11.91	23.89	25.86	108	23.96	25.31	106	2	75-136	30	
4,4-DDT	<11.91	23.89	26.65	112	23.96	25.70	107	5	78-125	30	
Endrin aldehyde	<11.91	23.89	28.64	120	23.96	26.73	112	7	78-130	30	
Methoxychlor	<11.91	23.89	23.90	100	23.96	24.08	101	1	71-122	30	
Endosulfan sulfate	<11.91	23.89	26.22	110	23.96	25.71	107	3	77-129	30	
Endrin ketone	<11.91	23.89	25.55	107	23.96	24.93	104	3	75-145	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33502

Lab Batch ID: 83553

Reporting Units: mg/kg

Date Prepared: 07/08/2010

Date Analyzed: 07/09/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S

Sample ID: 10070220-001 S

Method: SW3550 /SW8082

Project ID: N/A

Analyst: 1029

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
PCB-1260	<0.0596	0.5966	0.6187	104	0.5984	0.5438	91	13	52-184	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33507

Lab Batch ID: 83607

Reporting Units: ug/kg

Date Prepared: 07/09/2010
Date Analyzed: 07/09/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S
Sample ID: 10070220-001 S
Method: SW3550 /SW8270C

Project ID: N/A
Analyst: 1014
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Parent Sample Result A	Spike Added B	Spiked Sample Result C	Spiked Sample %R D	Spike Added E	Duplicate Spiked Sample Result F	Spiked Dup. %R G	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<101.5	1621	1512	93	1622	1509	93	0	52-128	30	
Acenaphthylene	<101.5	1621	1511	93	1622	1506	93	0	59-119	30	
Acetophenone	<101.5	1621	1468	91	1622	1486	92	1	53-115	30	
Anthracene	<101.5	1621	1579	97	1622	1487	92	5	51-137	30	
Benzo(a)anthracene	<101.5	1621	1698	105	1622	1558	96	9	45-163	30	
Benzo(a)pyrene	<101.5	1621	1808	112	1622	1686	104	7	52-164	30	
Benzo(b)fluoranthene	<101.5	1621	1901	117	1622	1776	109	7	58-154	30	
Benzo(g,h,i)perylene	<101.5	1621	1728	107	1622	1536	95	12	37-144	30	
Benzo(k)fluoranthene	<101.5	1621	1764	109	1622	1703	105	4	49-160	30	
Benzyl butyl phthalate	<101.5	1621	1915	118	1622	1669	103	14	40-179	30	
bis(2-chloroethoxy) methane	<101.5	1621	1390	86	1622	1400	86	0	53-120	30	
bis(2-chloroethyl) ether	<101.5	1621	1377	85	1622	1403	86	1	47-116	30	
bis(2-chloroisopropyl) ether	<101.5	1621	1380	85	1622	1389	86	1	45-112	30	
bis(2-ethylhexyl) phthalate	<101.5	1621	1865	115	1622	1608	99	15	43-172	30	
4-Bromophenylphenyl ether	<101.5	1621	1581	98	1622	1510	93	5	44-159	30	
Di-n-butyl phthalate	<203	1621	1805	111	1622	1561	96	14	54-131	30	
4-Chloro-3-methylphenol	<101.5	1621	1535	95	1622	1505	93	2	57-130	30	
4-Chloroaniline	<203	1621	1460	90	1622	1481	91	1	50-122	30	
2-Chloronaphthalene	<101.5	1621	1668	103	1622	1722	106	3	50-124	30	
2-Chlorophenol	<101.5	1621	1386	86	1622	1441	89	3	54-119	30	
4-Chlorophenyl phenyl ether	<101.5	1621	1750	108	1622	1650	102	6	57-133	30	
Chrysene	<101.5	1621	1696	105	1622	1553	96	9	42-165	30	
Dibenz(a,h)anthracene	<101.5	1621	1745	108	1622	1545	95	13	37-140	30	
Dibenzofuran	<101.5	1621	1497	92	1622	1462	90	2	44-138	30	

Matrix Spike Percent Recovery |D| = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery |G| = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of OC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Project ID: N/A
Analyst: 1014
Matrix: Soil

Client Sample Id:
Sample ID: 10070220-001 S
Method: SW3550/SW8270C

Date Prepared: 07/09/2010
Date Analyzed: 07/09/2010

Prep Batch #: 83607
Lab Batch ID: 83607
Reporting Units: ug/kg

Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
3,3-Dichlorobenzidine	<101.5	1621	1389	86	1622	1268	78	10	11-140	30	
2,4-Dichlorophenol	<101.5	1621	1512	93	1622	1539	95	2	56-131	30	
Diethyl phthalate	<101.5	1621	1768	109	1622	1531	94	15	51-126	30	
Dimethyl phthalate	<101.5	1621	1655	102	1622	1524	94	8	56-120	30	
2,4-Dimethylphenol	<101.5	1621	1224	76	1622	1234	76	0	49-124	30	
4,6-Dinitro-2-methyl phenol	<101.5	1621	1867	115	1622	1771	109	5	1-187	30	
2,4-Dinitrophenol	<203	1621	1792	111	1622	1582	98	12	4-200	30	
2,4-Dinitrotoluene	<101.5	1621	1778	110	1622	1523	94	16	57-138	30	
2,6-Dinitrotoluene	<101.5	1621	1730	107	1622	1585	98	9	61-136	30	
Fluoranthene	<101.5	1621	1798	111	1622	1534	95	16	40-155	30	
Fluorene	<101.5	1621	1707	105	1622	1614	100	5	55-128	30	
Hexachlorobenzene	<101.5	1621	1689	104	1622	1599	99	5	52-129	30	
Hexachlorobutadiene	<101.5	1621	1414	87	1622	1455	90	3	50-128	30	
Hexachlorocyclopentadiene	<101.5	1621	1511	93	1622	1557	96	3	13-144	30	
Hexachloroethane	<101.5	1621	1364	84	1622	1394	86	2	42-117	30	
Indeno(1,2,3-c,d)pyrene	<101.5	1621	1777	110	1622	1557	96	14	48-135	30	
Isophorone	<101.5	1621	1371	85	1622	1370	84	1	51-114	30	
2-Methylnaphthalene	<101.5	1621	1442	89	1622	1455	90	1	49-130	30	
2-Methylphenol	<101.5	1621	1429	88	1622	1443	89	1	54-119	30	
3&4-Methylphenol	<101.5	1621	1453	90	1622	1470	91	1	50-115	30	
4-Nitroaniline	<101.5	1621	1676	103	1622	1397	86	18	50-133	30	
3-Nitroaniline	<101.5	1621	1707	105	1622	1527	94	11	49-133	30	
2-Nitroaniline	<203	1621	1541	95	1622	1484	91	4	53-133	30	
Nitrobenzene	<101.5	1621	1335	82	1622	1344	83	1	48-113	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 83607

Lab Batch ID: 83607

Reporting Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Client Sample Id:

Sample ID: 10070220-001 S

Method: SW3550 /SW8270C

Project ID: N/A

Analyst: 1014

Matrix: Soil

Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2-Nitrophenol	<101.5	1621	1429	88	1622	1449	89	1	56-136	30	
4-Nitrophenol	<101.5	1621	1705	105	1622	1487	92	13	47-135	30	
N-Nitrosodimethylamine	<101.5	1621	838.7	52	1622	852.1	53	2	45-122	30	
N-Nitrosodi-n-propylamine	<101.5	1621	1463	90	1622	1479	91	1	44-113	30	
N-Nitrosodiphenylamine	<101.5	1621	1815	112	1622	1772	109	3	57-124	30	
Di-n-octyl phthalate	<101.5	1621	1973	122	1622	1817	112	9	25-185	30	
1,2,4,5-Tetrachlorobenzene	<101.5	1621	1461	90	1622	1476	91	1	51-131	30	
Pentachlorophenol	<203	1621	1791	110	1622	1624	100	10	34-154	30	
Phenanthrene	<101.5	1621	1585	98	1622	1488	92	6	46-141	30	
Phenol	<101.5	1621	1294	80	1622	1306	81	1	47-103	30	
Pyrene	<101.5	1621	1772	109	1622	1723	106	3	24-181	30	
2,3,4,6-Tetrachlorophenol	<101.5	1621	1888	116	1622	1710	105	10	49-141	30	
2,4,6-Trichlorophenol	<101.5	1621	1612	99	1622	1619	100	1	59-133	30	
2,4,5-Trichlorophenol	<101.5	1621	1589	98	1622	1561	96	2	61-138	30	

Matrix Spike Percent Recovery [DI = 100*(C-A)/B]

Matrix Spike Duplicate Percent Recovery [GI = 100*(F-A)/E]

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33518

Lab Batch ID: 83559

Reporting Units: mg/kg

Date Prepared: 07/12/2010
Date Analyzed: 07/12/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S
Sample ID: 10070220-001 S
Method: SW3050B /SW6020

Project ID: N/A
Analyst: 1034
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Total Metals Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Antimony	<1.212	19.61	9.867	50	22.88	11.77	51	2	75-125	30
Arsenic	1.827	19.61	18.87	87	22.88	22.17	89	2	75-125	30	
Barium	111.8	19.61	127.9	82	22.88	144.3	142	54	75-125	30	XF
Beryllium	<1.212	19.61	17.05	87	22.88	19.95	87	0	75-125	30	
Cadmium	<1.212	19.61	19.36	99	22.88	22.67	99	0	75-125	30	
Chromium	28.60	19.61	51.32	116	22.88	55.32	117	1	75-125	30	
Cobalt	19.33	19.61	35.33	82	22.88	41.03	95	15	75-125	30	
Copper	32.75	19.61	38.57	30	22.88	45.98	58	64	75-125	30	XF
Lead	15.45	19.61	31.94	84	22.88	36.97	94	11	75-125	30	
Mercury	<0.0485	0.4902	0.5392	110	0.5720	0.6464	113	3	75-125	30	
Nickel	41.93	19.61	53.48	59	22.88	59.72	78	28	75-125	30	X
Selenium	<1.212	19.61	16.85	86	22.88	19.39	85	1	75-125	30	
Silver	<1.212	19.61	19.80	101	22.88	23.57	103	2	75-125	30	
Thallium	<0.9694	19.61	21.68	111	22.88	25.51	111	0	75-125	30	
Tin	<2.424	19.61	20.19	103	22.88	23.58	103	0	75-125	30	
Vanadium	42.50	19.61	64.11	110	22.88	69.67	119	8	75-125	30	
Zinc	68.49	19.61	97.54	148	22.88	110.4	183	21	75-125	30	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33518

Lab Batch ID: 83620

Reporting Units: mg/kg

Date Prepared: 07/12/2010
Date Analyzed: 07/14/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S
Sample ID: 10070220-001 S
Method: SW3050B /SW6020

Project ID: N/A
Analyst: 1034
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Total Metals Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Antimony	<1.212	19.61	10.82	55	22.88	12.76	56	2	75-125	30
Arsenic	1.827	19.61	21.66	101	22.88	24.77	100	1	75-125	30	
Barium	111.8	19.61	134.2	114	22.88	149.5	165	37	75-125	30	XF
Beryllium	<1.212	19.61	12.61	64	22.88	14.68	64	0	75-125	30	X
Cadmium	<1.212	19.61	20.58	105	22.88	23.85	104	1	75-125	30	
Chromium	28.60	19.61	54.06	130	22.88	57.72	127	2	75-125	30	X
Cobalt	19.33	19.61	43.70	124	22.88	50.84	138	11	75-125	30	X
Copper	32.75	19.61	41.65	45	22.88	48.68	70	43	75-125	30	XF
Lead	15.45	19.61	32.00	84	22.88	36.92	94	11	75-125	30	
Mercury	<0.0485	0.4902	0.5588	114	0.5720	0.6292	110	4	75-125	30	
Nickel	41.93	19.61	61.51	100	22.88	67.67	113	12	75-125	30	
Selenium	<1.212	19.61	18.83	96	22.88	21.90	96	0	75-125	30	
Silver	<1.212	19.61	20.79	106	22.88	24.29	106	0	75-125	30	
Thallium	<0.9694	19.61	21.41	109	22.88	24.97	109	0	75-125	30	
Tin	<2.424	19.61	22.07	113	22.88	25.67	112	1	75-125	30	
Vanadium	42.50	19.61	71.17	146	22.88	76.36	148	1	75-125	30	X
Zinc	68.49	19.61	103.2	177	22.88	114.8	202	13	75-125	30	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 33508

Lab Batch ID: 83517

Reporting Units: ug/kg

Date Prepared: 07/08/2010
Date Analyzed: 07/08/2010

Client Sample Id: G8-25M
Sample ID: 10070803-001 S
Method: SW5030/SW8260B

Project ID: N/A
Analyst: 1011
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Volatile Organic Compounds										
Analytes										
Dichlorodifluoromethane	<2.994	71.57	65.81	92	71.86	61.00	85	8	26-140	30
Chloromethane	<2.994	71.57	62.81	88	71.86	60.64	84	5	42-126	30
Vinyl Chloride	<2.994	71.57	64.98	91	71.86	62.22	87	4	34-137	30
Bromomethane	<2.994	71.57	62.41	87	71.86	60.12	84	4	35-132	30
Chloroethane	<2.994	71.57	67.77	95	71.86	68.03	95	0	33-133	30
Acetone	<11.98	71.57	36.14	50	71.86	29.33	41	20	27-177	30
Trichlorofluoromethane	<2.994	71.57	78.23	109	71.86	74.04	103	6	36-136	30
1,1-Dichloroethene	<2.994	71.57	61.39	86	71.86	59.46	83	4	38-124	30
Methylene chloride	<2.994	71.57	58.30	81	71.86	57.32	80	1	35-129	30
trans-1,2-Dichloroethene	<2.994	71.57	67.08	94	71.86	62.35	87	8	33-135	30
1,1-Dichloroethane	<2.994	71.57	59.31	83	71.86	57.79	80	4	45-125	30
Vinyl acetate	<2.994	71.57	70.64	99	71.86	63.24	88	12	4-128	30
2-Butanone (MEK)	<11.98	71.57	48.62	68	71.86	43.07	60	13	17-152	30
cis-1,2-Dichloroethene	<2.994	71.57	62.88	88	71.86	60.24	84	5	45-122	30
Bromochloromethane	<2.994	71.57	60.47	84	71.86	58.16	81	4	42-127	30
Chloroform	<2.994	71.57	61.85	86	71.86	60.05	84	2	44-119	30
2,2-Dichloropropane	<2.994	71.57	61.12	85	71.86	58.49	81	5	34-126	30
1,1,1-Trichloroethane	<2.994	71.57	65.91	92	71.86	62.67	87	6	40-132	30
1,2-Dichloroethane	<2.994	71.57	64.09	90	71.86	63.73	89	1	30-132	30
1,1-Dichloropropene	<2.994	71.57	63.63	89	71.86	61.13	85	5	29-132	30
Carbon tetrachloride	<2.994	71.57	62.14	87	71.86	60.34	84	4	30-138	30
Benzene	<2.994	71.57	61.73	86	71.86	59.10	82	5	35-126	30
Dibromomethane	<2.994	71.57	64.65	90	71.86	62.89	88	2	37-129	30
1,2-Dichloropropane	<2.994	71.57	61.54	86	71.86	60.35	84	2	41-117	30

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Prep Batch #: 83517

Lab Batch ID: 83517

Reporting Units: ug/kg

Date Prepared: 07/08/2010

Date Analyzed: 07/08/2010

Client Sample Id:

Sample ID: 10070803-001 S

Method: SW5030 /SW8260B

Project ID: N/A

Analyst: 1011

Matrix: Soil

Parent Sample Result [A]	Spiked Added [B]	Spiked Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
<5.988	71.57	64.73	90	71.86	62.29	87	3	11-147	30	
<2.994	71.57	63.75	89	71.86	60.50	84	6	33-132	30	
<11.98	71.57	73.15	102	71.86	72.03	100	2	22-149	30	
<2.994	71.57	60.18	84	71.86	59.00	82	2	34-127	30	
<2.994	71.57	59.02	82	71.86	58.09	81	1	22-122	30	
<11.98	71.57	71.19	99	71.86	72.95	102	3	13-137	30	
<2.994	71.57	57.76	81	71.86	57.51	80	1	25-118	30	
<2.994	71.57	62.53	87	71.86	60.91	85	2	32-132	30	
<2.994	71.57	63.15	88	71.86	59.76	83	6	27-129	30	
<2.994	71.57	62.13	87	71.86	60.65	84	4	30-130	30	
<11.98	71.57	58.15	81	71.86	54.05	75	8	4-120	30	
<2.994	71.57	65.07	91	71.86	63.51	88	3	35-132	30	
<2.994	71.57	58.76	82	71.86	57.51	80	2	30-130	30	
<11.98	71.57	72.91	102	71.86	65.52	91	11	12-153	30	
<2.994	71.57	56.16	78	71.86	54.19	75	4	37-126	30	
<2.994	71.57	49.12	69	71.86	47.98	67	3	19-125	30	
<2.994	71.57	68.63	96	71.86	67.87	94	2	2-122	30	
<2.994	71.57	59.25	83	71.86	56.94	79	5	22-141	30	
<2.994	71.57	60.52	85	71.86	57.74	80	6	25-127	30	
<2.994	71.57	63.32	88	71.86	60.78	85	3	18-133	30	
<5.988	143.1	128.4	90	143.7	122.8	85	6	18-134	30	
<2.994	71.57	60.79	85	71.86	58.54	81	5	17-122	30	
<2.994	71.57	71.04	99	71.86	67.45	94	5	34-130	30	
3.880	71.57	65.91	87	71.86	65.13	85	2	16-139	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude

Work Order #: 10070220

Project ID: N/A
Analyst: 1011
Matrix: Soil

Client Sample ID:
Sample ID: 10070803-001 S
Method: SW5030 /SW8260B

Date Prepared: 07/08/2010
Date Analyzed: 07/08/2010

Prep Batch #: 83517
Lab Batch ID: 83517
Reporting Units: ug/kg

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2,3-Trichloropropane	<2.994	71.57	60.26	84	62.91	88	5	23-134	30	
1,3-Dichlorobenzene	<2.994	71.57	58.30	81	55.77	78	4	21-123	30	
1,4-Dichlorobenzene	<2.994	71.57	57.97	81	54.85	76	6	29-115	30	
1,2-Dichlorobenzene	<2.994	71.57	57.75	81	55.57	77	5	20-126	30	
1,2-Dibromo-3-chloropropane	<23.95	71.57	75.75	106	70.30	98	8	33-125	30	
1,2,4-Trichlorobenzene	<2.994	71.57	60.16	84	56.71	79	6	12-108	30	
Iodomethane	<11.98	71.57	65.70	92	64.27	89	3	22-131	30	
Naphthalene	<2.994	71.57	71.92	100	67.06	93	7	36-155	30	
1,2,3-Trichlorobenzene	<2.994	71.57	59.50	83	56.04	78	6	5-111	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

ANALYTICAL REPORT

PROJECT NO. 10070220

Phase Sep Science East Station

Lot #: COG100440

Betsy Orr

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.


Christina M. Kovitch
Project Manager

July 19, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture	(#P330-10-00139)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW HW	X X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002319)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203010)	WW –	X –
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW/ Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pttsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0G100440

Sample Receiving:

TestAmerica Pittsburgh received samples on July 10, 2010. The cooler was received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

OPP's:

There were no problems associated with the analysis.

General Chemistry:

The samples for sulfide analysis were received outside of holding time. The samples were analyzed and all results are reported as is.



Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America

5710 Executive Drive, Suite 106
Catonsville, MD 21228

Contact: Ken Ives
Phone : 410-869-0085

W.O. No.: 10070220
P.O. No.: _____
Project Name: Guide
Project Number: N/A

For Questions or issues please contact: John Slowikowski

Report Due On : **07/23/10 05:00**

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
10070220-001	Guide-MW11A-SO-14 to 16	06/29/10	15:40	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10070220-001	Guide-MW11A-SO-14 to 16	06/29/10	15:40	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10070220-002	Guide-MW11B-SO-18 to 20	06/30/10	11:30	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10070220-002	Guide-MW11B-SO-18 to 20	06/30/10	11:30	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10070220-003	Guide-SO-Dup3	06/30/10	12:00	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10070220-003	Guide-SO-Dup3	06/30/10	12:00	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL
10070220-004	Guide-MW10-SO-18 to 20	07/02/10	10:15	Solid	Organophosphorus Compounds	SW8141A	4 OZ WM GLASS	COOL
10070220-004	Guide-MW10-SO-18 to 20	07/02/10	10:15	Solid	Sulfides	SW9030B	4 OZ WM GLASS	COOL

Data Deliverables Required: Results, copy of COC and QC

Perform Q.C. on Sample :

Send Report Attn : BETSY ORR

Airbill No.: _____ Carrier: TEST AMERICA COURIER

Condition Upon Receipt : _____

Comments : _____

Samples Relinquished By: [Signature] Date: 7/9/10 Time: 1012 Samples Received By: [Signature]

Samples Relinquished By: [Signature] Date: 7/9/10 Time: 1136 Samples Received By: _____

Samples Relinquished By: _____ Date: 7/10/10 Time: 1645 Samples Received By: [Signature]

Sub-Contractor

Method

Matrix

Analyte Name

METHODS SUMMARY

COG100440

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Organophosphorous Compounds by GC	SW846 8141A	SW846 3541
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

COG100440

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L32JJ	001	10070220-001	06/29/10	15:40
L32JK	002	10070220-002	06/30/10	11:30
L32JL	003	10070220-003	06/30/10	12:00
L32JM	004	10070220-004	06/30/10	10:15

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10070220-001

GC Semivolatiles

Lot-Sample #...: C0G100440-001 Work Order #...: L32JJ1AC Matrix.....: SOLID
Date Sampled...: 06/29/10 Date Received..: 07/10/10 MS Run #.....: 0193019
Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
Prep Batch #...: 0193034 Analysis Time..: 06:01
Dilution Factor: 1
% Moisture.....: 25 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	44	ug/kg
Disulfoton	ND	44	ug/kg
Famphur	ND	44	ug/kg
Methyl parathion	ND	44	ug/kg
Parathion	ND	44	ug/kg
Thionazin	ND	44	ug/kg
Phorate	ND	44	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	88	(47 - 130)	
Tributyl phosphate	76	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070220-002

GC Semivolatiles

Lot-Sample #...: C0G100440-002 Work Order #...: L32JK1AC Matrix.....: SOLID
Date Sampled...: 06/30/10 Date Received..: 07/10/10 MS Run #.....: 0193019
Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
Prep Batch #...: 0193034 Analysis Time..: 06:28
Dilution Factor: 1
% Moisture.....: 25 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	44	ug/kg
Disulfoton	ND	44	ug/kg
Famphur	ND	44	ug/kg
Methyl parathion	ND	44	ug/kg
Parathion	ND	44	ug/kg
Thionazin	ND	44	ug/kg
Phorate	ND	44	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	73	(47 - 130)	
Tributyl phosphate	77	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070220-003

GC Semivolatiles

Lot-Sample #...: C0G100440-003 Work Order #...: L32JL1AC Matrix.....: SOLID
Date Sampled...: 06/30/10 Date Received..: 07/10/10 MS Run #.....: 0193019
Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
Prep Batch #...: 0193034 Analysis Time..: 06:55
Dilution Factor: 1
% Moisture.....: 25 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	44	ug/kg
Disulfoton	ND	44	ug/kg
Famphur	ND	44	ug/kg
Methyl parathion	ND	44	ug/kg
Parathion	ND	44	ug/kg
Thionazin	ND	44	ug/kg
Phorate	ND	44	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	73	(47 - 130)	
Tributyl phosphate	72	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070220-004

GC Semivolatiles

Lot-Sample #...: C0G100440-004 **Work Order #...**: L32JM1AC **Matrix.....**: SOLID
Date Sampled...: 06/30/10 **Date Received..**: 07/10/10 **MS Run #.....**: 0193019
Prep Date.....: 07/12/10 **Analysis Date..**: 07/16/10
Prep Batch #...: 0193034 **Analysis Time..**: 07:21
Dilution Factor: 0.99
% Moisture.....: 26 **Method.....**: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	44	ug/kg
Disulfoton	ND	44	ug/kg
Famphur	ND	44	ug/kg
Methyl parathion	ND	44	ug/kg
Parathion	ND	44	ug/kg
Thionazin	ND	44	ug/kg
Phorate	ND	44	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	109	(47 - 130)	
Tributyl phosphate	116	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: COG100440
MB Lot-Sample #: COG120000-034
Analysis Date...: 07/16/10
Dilution Factor: 1

Work Order #...: L32761AA
Prep Date.....: 07/12/10
Prep Batch #...: 0193034

Matrix.....: SOLID
Analysis Time...: 03:24

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Thionazin	ND	33	ug/kg	SW846 8141A
Dimethoate	ND	33	ug/kg	SW846 8141A
Disulfoton	ND	33	ug/kg	SW846 8141A
Famphur	ND	33	ug/kg	SW846 8141A
Methyl parathion	ND	33	ug/kg	SW846 8141A
Parathion	ND	33	ug/kg	SW846 8141A
Phorate	ND	33	ug/kg	SW846 8141A
	<u>PERCENT</u>	<u>RECOVERY</u>		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Triphenyl phosphate	69	(47 - 130)		
Tributyl phosphate	56	(55 - 125)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0G100440 Work Order #...: L32761AC Matrix.....: SOLID
 LCS Lot-Sample#: C0G120000-034
 Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
 Prep Batch #...: 0193034 Analysis Time..: 09:35
 Dilution Factor: 1

<u>PARAMETER</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	<u>METHOD</u>
Thionazin	109	(48 - 126)	SW846 8141A
Phorate	111	(41 - 143)	SW846 8141A
Disulfoton	106	(31 - 136)	SW846 8141A
Methyl parathion	113	(43 - 146)	SW846 8141A
Parathion	131	(52 - 133)	SW846 8141A
Famphur	111	(54 - 137)	SW846 8141A
Dimethoate	113	(40 - 143)	SW846 8141A
Tetraethyldithiopyro- phosphate	107	(48 - 126)	SW846 8141A
O,O,O-Triethylphosphoro- thioate	106	(45 - 130)	SW846 8141A

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Triphenyl phosphate	70	(47 - 130)
Tributyl phosphate	71	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0G100440 Work Order #...: L301T1AE-MS Matrix.....: SOLID
 MS Lot-Sample #: C0G090463-001 L301T1AF-MSD
 Date Sampled...: 06/28/10 Date Received...: 07/09/10 MS Run #.....: 0193019
 Prep Date.....: 07/12/10 Analysis Date...: 07/16/10
 Prep Batch #...: 0193034 Analysis Time...: 02:04
 Dilution Factor: 1 % Moisture.....: 2.3

PARAMETER	PERCENT	RECOVERY	RPD		METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
Thionazin	92	(48 - 126)			SW846 8141A
	107	(48 - 126)	16	(0-27)	SW846 8141A
Phorate	98	(41 - 143)			SW846 8141A
	113	(41 - 143)	15	(0-30)	SW846 8141A
Disulfoton	90	(31 - 136)			SW846 8141A
	103	(31 - 136)	14	(0-30)	SW846 8141A
Methyl parathion	90	(43 - 146)			SW846 8141A
	109	(43 - 146)	20	(0-30)	SW846 8141A
Parathion	107	(52 - 133)			SW846 8141A
	136 a	(52 - 133)	23	(0-30)	SW846 8141A
Famphur	77	(54 - 137)			SW846 8141A
	80	(54 - 137)	3.5	(0-30)	SW846 8141A
Dimethoate	80	(40 - 143)			SW846 8141A
	72	(40 - 143)	11	(0-30)	SW846 8141A
Tetraethyldithiopyro- phosphate	89	(48 - 126)			SW846 8141A
	103	(48 - 126)	15	(0-28)	SW846 8141A
O,O,O-Triethylphosphoro- thioate	88	(45 - 130)			SW846 8141A
	104	(45 - 130)	16	(0-30)	SW846 8141A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Triphenyl phosphate	80	(47 - 130)
	78	(47 - 130)
Tributyl phosphate	88	(55 - 125)
	85	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters
 Results and reporting limits have been adjusted for dry weight.
 a Spiked analyte recovery is outside stated control limits.

Phase Separation Sciences

Client Sample ID: 10070220-001

General Chemistry

Lot-Sample #...: COG100440-001 Work Order #...: L32JJ Matrix.....: SOLID
Date Sampled...: 06/29/10 Date Received..: 07/10/10
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	75.3	1.0	%	SM20 2540G	07/13-07/14/10	0194178
			Dilution Factor: 1	Analysis Time..: 11:02	MS Run #.....: 0194111	
Total Sulfide	ND	39.9	mg/kg	SW846 9030B/9034	07/12/10	0193167
			Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070220-002

General Chemistry

Lot-Sample #...: COG100440-002 Work Order #...: L32JK Matrix.....: SOLID
Date Sampled...: 06/30/10 Date Received...: 07/10/10
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	74.8	1.0	%	SM20 2540G	07/13-07/14/10	0194178
			Dilution Factor: 1	Analysis Time..: 11:02	MS Run #.....: 0194111	
Total Sulfide	8.6 B	40.1	mg/kg	SW846 9030B/9034	07/12/10	0193167
			Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Phase Separation Sciences

Client Sample ID: 10070220-003

General Chemistry

Lot-Sample #...: COG100440-003 Work Order #...: L32JL Matrix.....: SOLID
Date Sampled...: 06/30/10 Date Received...: 07/10/10
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	75.0	1.0	%	SM20 2540G	07/13-07/14/10	0194178
			Dilution Factor: 1	Analysis Time..: 11:02	MS Run #.....: 0194111	
Total Sulfide	11.7 B	40.0	mg/kg	SW846 9030B/9034	07/12/10	0193167
			Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Phase Separation Sciences

Client Sample ID: 10070220-004

General Chemistry

Lot-Sample #...: COG100440-004 Work Order #...: L32JM Matrix.....: SOLID
Date Sampled...: 06/30/10 Date Received...: 07/10/10
% Moisture.....: 26

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	74.4	1.0	%	SM20 2540G	07/13-07/14/10	0194178
				Dilution Factor: 1	Analysis Time..: 11:02	MS Run #.....: 0194111
Total Sulfide	ND	40.3	mg/kg	SW846 9030B/9034	07/12/10	0193167
				Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: COG100440

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Sulfide	ND	Work Order #: L33FE1AA 30.0	mg/kg	MB Lot-Sample #: SW846 9030B/9034	COG120000-167 07/12/10	0193167
		Dilution Factor: 1				
		Analysis Time..: 14:25				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: COG100440

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide		WO#:L33FE1AC-LCS/L33FE1AD-LCSD		LCS Lot-Sample#: COG120000-167			
	100	(85 - 115)			SW846 9030B/9034	07/12/10	0193167
	98	(85 - 115)	1.7	(0-20)	SW846 9030B/9034	07/12/10	0193167
		Dilution Factor: 1		Analysis Time..: 14:25			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COG100440

Work Order #...: L301T-SMP
L301T-DUP

Matrix.....: SOLID

Date Sampled...: 06/28/10

Date Received...: 07/09/10

% Moisture.....: 2.3

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	97.7	96.8	%	0.90	(0-20)	SD Lot-Sample #: COG090463-001 SM20 2540G	07/13-07/14/10	0194178
			Dilution Factor: 1			Analysis Time..: 11:02	MS Run Number..: 0194111	

Analytical Report for

EA Engineering

Certificate of Analysis No.: 10070802

Project Manager: Pete Lekas

Project Name : Gude Landfill

Project Location: Rockville, MD



July 28, 2010

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL
PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047

PHASE SEPARATION SCIENCE, INC.



July 28, 2010

Pete Lekas
EA Engineering
15 Loveton Circle
Sparks, MD 21152

Reference: PSS Work Order No: **10070802**
Project Name : Gude Landfill
Project Location: Rockville, MD

Dear Pete Lekas :

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered **10070802**.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on September 6, 2010. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Dan Prucnal

Laboratory Manager



Case Narrative Summary

Client Name: EA Engineering

Project Name: Gude Landfill

Project ID: N/A

Work Order Number: 10070802

The following samples were received under chain of custody by Phase Separation Science (PSS) on 07/08/2010 at 11:50 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
10070802-001	Gude-MW4-SO-2 to 4	SOIL	07/06/2010 09:40
10070802-002	Gude-MW9-SO-20 to 22	SOIL	07/06/2010 14:00
10070802-003	Gude-MW12-SO-22 to 24	SOIL	07/06/2010 12:15
10070802-004	Gude-SO-DUP4	SOIL	07/06/2010 12:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in the Sample Receipt Checklist.

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Notes:

1. The presence of common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than one-half of the reporting limit.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

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CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4	Date/Time Sampled: 07/06/2010 09:40	PSS Sample ID: 10070802-001
Matrix: SOIL	Date/Time Received: 07/08/2010 11:50	% Solids: 89

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Arsenic	3.1	mg/kg	0.5		1	0.2	07/12/10	07/12/10 17:53	1034
Barium	40	mg/kg	2.3		1	1.2	07/12/10	07/15/10 00:50	1034
Beryllium	ND	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Cadmium	ND	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Chromium	52	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Cobalt	16	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Copper	25	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Lead	31	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Mercury	ND	mg/kg	0.09		1	0.05	07/12/10	07/12/10 17:53	1034
Nickel	63	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Selenium	ND	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Silver	ND	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Thallium	ND	mg/kg	1.9		1	0.9	07/12/10	07/12/10 17:53	1034
Tin	ND	mg/kg	4.7		1	2.3	07/12/10	07/12/10 17:53	1034
Vanadium	30	mg/kg	2.3		1	1.2	07/12/10	07/12/10 17:53	1034
Zinc	64	mg/kg	9.4		1	4.7	07/12/10	07/15/10 00:50	1034

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4	Date/Time Sampled: 07/06/2010 09:40	PSS Sample ID: 10070802-001
Matrix: SOIL	Date/Time Received: 07/08/2010 11:50	% Solids: 89

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
gamma-BHC (Lindane)	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
beta-BHC	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
delta-BHC	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Heptachlor	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Aldrin	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Heptachlor epoxide	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
gamma-Chlordane	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
alpha-Chlordane	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
4,4-DDE	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Endosulfan I	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Dieldrin	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Endrin	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
4,4-DDD	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Endosulfan II	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
4,4-DDT	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Endrin aldehyde	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Methoxychlor	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Endosulfan sulfate	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Endrin ketone	ND	ug/kg	110		5	54	07/09/10	07/12/10 19:02	1029
Toxaphene	ND	ug/kg	1,100		5	540	07/09/10	07/12/10 19:02	1029
Chlordane	ND	ug/kg	1,100		5	540	07/09/10	07/12/10 19:02	1029

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4 **Date/Time Sampled: 07/06/2010 09:40** **PSS Sample ID: 10070802-001**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 89**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

Clean up Method: SW846 3665A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029
PCB-1221	ND	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029
PCB-1232	ND	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029
PCB-1242	ND	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029
PCB-1248	ND	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029
PCB-1254	1.7	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029
PCB-1260	ND	mg/kg	0.5		5	0.3	07/08/10	07/09/10 16:01	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	220		1	110	07/13/10	07/14/10 23:28	1029
2,4,5-TP (Silvex)	ND	ug/kg	22		1	11	07/13/10	07/14/10 23:28	1029
2,4,5-T	ND	ug/kg	22		1	11	07/13/10	07/14/10 23:28	1029
Dinoseb	ND	ug/kg	110		1	55	07/13/10	07/14/10 23:28	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4 **Date/Time Sampled: 07/06/2010 09:40** **PSS Sample ID: 10070802-001**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 89**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Chloromethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Vinyl Chloride	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Bromomethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Chloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Acetone	27	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011
Trichlorofluoromethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,1-Dichloroethene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Methylene chloride	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,1-Dichloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Vinyl acetate	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
2-Butanone (MEK)	ND	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Bromochloromethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Chloroform	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
2,2-Dichloropropane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,2-Dichloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,1-Dichloropropene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Carbon tetrachloride	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Benzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Dibromomethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,2-Dichloropropane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Carbon Disulfide	ND	ug/kg	10		1	4.9	07/09/10	07/09/10 11:42	1011
Trichloroethene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Acrylonitrile	ND	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011
Bromodichloromethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011

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CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4 **Date/Time Sampled: 07/06/2010 09:40** **PSS Sample ID: 10070802-001**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 89**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Toluene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,3-Dichloropropane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
2-Hexanone (MBK)	ND	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011
1,2-Dibromoethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Dibromochloromethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Acrolein	ND	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Bromoform	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Tetrachloroethene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Chlorobenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Ethylbenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
m&p-Xylene	ND	ug/kg	10		1	4.9	07/09/10	07/09/10 11:42	1011
Styrene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
o-Xylene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	39		1	20	07/09/10	07/09/10 11:42	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Iodomethane	ND	ug/kg	20		1	9.8	07/09/10	07/09/10 11:42	1011
Naphthalene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.5	07/09/10	07/09/10 11:42	1011
Hexanal (TIC)	20	ug/kg	10		1	4.9	07/09/10	07/09/10 11:42	1011

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CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4 **Date/Time Sampled: 07/06/2010 09:40** **PSS Sample ID: 10070802-001**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 89**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Acenaphthylene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Acetophenone	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Anthracene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Benzo(a)anthracene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Benzo(a)pyrene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Benzo(b)fluoranthene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Benzo(g,h,i)perylene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Benzo(k)fluoranthene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Benzyl butyl phthalate	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
bis(2-chloroethoxy) methane	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
bis(2-chloroethyl) ether	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
bis(2-ethylhexyl) phthalate	2,500	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
4-Bromophenylphenyl ether	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Di-n-butyl phthalate	ND	ug/kg	370		1	190	07/09/10	07/14/10 21:25	1014
4-Chloro-3-methylphenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
4-Chloroaniline	ND	ug/kg	370		1	190	07/09/10	07/14/10 21:25	1014
2-Chloronaphthalene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2-Chlorophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Chrysene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Dibenz(a,h)anthracene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Dibenzofuran	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
3,3-Dichlorobenzidine	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2,4-Dichlorophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Diethyl phthalate	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Dimethyl phthalate	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2,4-Dimethylphenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4 **Date/Time Sampled: 07/06/2010 09:40** **PSS Sample ID: 10070802-001**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 89**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	370		1	190	07/09/10	07/14/10 21:25	1014
2,4-Dinitrotoluene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2,6-Dinitrotoluene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Fluoranthene	160	ug/kg	190	J	1	93	07/09/10	07/14/10 21:25	1014
Fluorene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Hexachlorobenzene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Hexachlorobutadiene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Hexachlorocyclopentadiene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Hexachloroethane	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Isophorone	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2-Methylnaphthalene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2-Methylphenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
3&4-Methylphenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
4-Nitroaniline	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
3-Nitroaniline	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2-Nitroaniline	ND	ug/kg	370		1	190	07/09/10	07/14/10 21:25	1014
Nitrobenzene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2-Nitrophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
4-Nitrophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
N-Nitrosodimethylamine	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
N-Nitrosodiphenylamine	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Di-n-octyl phthalate	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Pentachlorophenol	ND	ug/kg	370		1	190	07/09/10	07/14/10 21:25	1014
Phenanthrene	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Phenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Pyrene	120	ug/kg	190	J	1	93	07/09/10	07/14/10 21:25	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW4-SO-2 to 4 **Date/Time Sampled: 07/06/2010 09:40** **PSS Sample ID: 10070802-001**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 89**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2,4,5-Trichlorophenol	ND	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
1,1'-Biphenyl, 2,2',4,4',5-pentachloro- (TIC)	190	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
1,1'-Biphenyl, 2,3,3',4',6-pentachloro- (TIC)	190	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
2-Propenoic acid, 2-methyl-, 1-met (TIC)	180	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
1,1'-Biphenyl, 2,3',4,4',5-pentach (TIC)	180	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
unknown (TIC)	220	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
unknown (TIC)	240	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014
Erucylamide (TIC)	170	ug/kg	190		1	93	07/09/10	07/14/10 21:25	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	2.8		1	1.4	07/12/10	07/12/10 16:30	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Arsenic	1.9	mg/kg	0.5		1	0.2	07/12/10	07/12/10 17:59	1034
Barium	97	mg/kg	2.4		1	1.2	07/12/10	07/15/10 00:56	1034
Beryllium	1.3	mg/kg	2.4	J	1	1.2	07/12/10	07/12/10 17:59	1034
Cadmium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Chromium	39	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Cobalt	15	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Copper	9.1	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Lead	13	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Mercury	ND	mg/kg	0.10		1	0.05	07/12/10	07/12/10 17:59	1034
Nickel	32	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Selenium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Silver	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Thallium	ND	mg/kg	2.0		1	1	07/12/10	07/12/10 17:59	1034
Tin	ND	mg/kg	4.9		1	2.4	07/12/10	07/12/10 17:59	1034
Vanadium	38	mg/kg	2.4		1	1.2	07/12/10	07/12/10 17:59	1034
Zinc	100	mg/kg	9.7		1	4.9	07/12/10	07/15/10 00:56	1034

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
gamma-BHC (Lindane)	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
beta-BHC	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
delta-BHC	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Heptachlor	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Aldrin	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Heptachlor epoxide	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
gamma-Chlordane	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
alpha-Chlordane	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
4,4-DDE	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Endosulfan I	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Dieldrin	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Endrin	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
4,4-DDD	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Endosulfan II	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
4,4-DDT	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Endrin aldehyde	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Methoxychlor	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Endosulfan sulfate	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Endrin ketone	ND	ug/kg	23		1	12	07/09/10	07/12/10 19:31	1029
Toxaphene	ND	ug/kg	230		1	120	07/09/10	07/12/10 19:31	1029
Chlordane	ND	ug/kg	230		1	120	07/09/10	07/12/10 19:31	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:30	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	240		1	120	07/13/10	07/14/10 21:19	1029
2,4,5-TP (Silvex)	ND	ug/kg	24		1	12	07/13/10	07/14/10 21:19	1029
2,4,5-T	ND	ug/kg	24		1	12	07/13/10	07/14/10 21:19	1029
Dinoseb	ND	ug/kg	120		1	59	07/13/10	07/14/10 21:19	1029

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CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Chloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Vinyl Chloride	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Bromomethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Chloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Acetone	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011
Trichlorofluoromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,1-Dichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Methylene chloride	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,1-Dichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Vinyl acetate	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
2-Butanone (MEK)	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Bromochloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Chloroform	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
2,2-Dichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,2-Dichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,1-Dichloropropene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Carbon tetrachloride	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Benzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Dibromomethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,2-Dichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Carbon Disulfide	ND	ug/kg	11		1	5.3	07/09/10	07/09/10 12:11	1011
Trichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Acrylonitrile	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011
Bromodichloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Toluene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,3-Dichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
2-Hexanone (MBK)	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011
1,2-Dibromoethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Dibromochloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Acrolein	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Bromoform	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Tetrachloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Chlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Ethylbenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
m&p-Xylene	ND	ug/kg	11		1	5.3	07/09/10	07/09/10 12:11	1011
Styrene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
o-Xylene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	43		1	21	07/09/10	07/09/10 12:11	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Iodomethane	ND	ug/kg	21		1	11	07/09/10	07/09/10 12:11	1011
Naphthalene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 12:11	1011
Nonanal (TIC)	8	ug/kg	11		1	5.3	07/09/10	07/09/10 12:11	1011
Heptanal (TIC)	7	ug/kg	11		1	5.3	07/09/10	07/09/10 12:11	1011
Octanal (TIC)	20	ug/kg	11		1	5.3	07/09/10	07/09/10 12:11	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22	Date/Time Sampled: 07/06/2010 14:00	PSS Sample ID: 10070802-002
Matrix: SOIL	Date/Time Received: 07/08/2010 11:50	% Solids: 83

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Hexanal (TIC)	9	ug/kg	11		1	5.3	07/09/10	07/09/10 12:11	1011

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CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Acenaphthylene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Acetophenone	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Anthracene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Benzo(a)anthracene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Benzo(a)pyrene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Benzo(b)fluoranthene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Benzo(g,h,i)perylene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Benzo(k)fluoranthene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Benzyl butyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
bis(2-chloroethoxy) methane	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
bis(2-chloroethyl) ether	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
4-Bromophenylphenyl ether	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Di-n-butyl phthalate	ND	ug/kg	400		1	200	07/09/10	07/14/10 20:55	1014
4-Chloro-3-methylphenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
4-Chloroaniline	ND	ug/kg	400		1	200	07/09/10	07/14/10 20:55	1014
2-Chloronaphthalene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2-Chlorophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Chrysene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Dibenz(a,h)anthracene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Dibenzofuran	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
3,3-Dichlorobenzidine	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2,4-Dichlorophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Diethyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Dimethyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2,4-Dimethylphenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014

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CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	400		1	200	07/09/10	07/14/10 20:55	1014
2,4-Dinitrotoluene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2,6-Dinitrotoluene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Fluoranthene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Fluorene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Hexachlorobenzene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Hexachlorobutadiene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Hexachlorocyclopentadiene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Hexachloroethane	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Isophorone	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2-Methylnaphthalene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2-Methylphenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
3&4-Methylphenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
4-Nitroaniline	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
3-Nitroaniline	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2-Nitroaniline	ND	ug/kg	400		1	200	07/09/10	07/14/10 20:55	1014
Nitrobenzene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2-Nitrophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
4-Nitrophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
N-Nitrosodimethylamine	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
N-Nitrosodiphenylamine	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Di-n-octyl phthalate	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Pentachlorophenol	ND	ug/kg	400		1	200	07/09/10	07/14/10 20:55	1014
Phenanthrene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Phenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Pyrene	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014

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CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW9-SO-20 to 22 **Date/Time Sampled: 07/06/2010 14:00** **PSS Sample ID: 10070802-002**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 83**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
2,4,5-Trichlorophenol	ND	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
Erucylamide (TIC)	170	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014
9-Octadecenamide, (Z)- (TIC)	1,400	ug/kg	200		1	100	07/09/10	07/14/10 20:55	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.0		1	1.5	07/12/10	07/12/10 16:30	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW12-SO-22 to 24 Date/Time Sampled: 07/06/2010 12:15 PSS Sample ID: 10070802-003
Matrix: SOIL Date/Time Received: 07/08/2010 11:50 % Solids: 79

Total Metals

Analytical Method: SW846 6020

Preparation Method: SW846 3050B

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Antimony	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Arsenic	1.1	mg/kg	0.5		1	0.2	07/12/10	07/12/10 18:05	1034
Barium	110	mg/kg	2.4		1	1.2	07/12/10	07/15/10 01:02	1034
Beryllium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Cadmium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Chromium	26	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Cobalt	13	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Copper	35	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Lead	17	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Mercury	ND	mg/kg	0.09		1	0.05	07/12/10	07/12/10 18:05	1034
Nickel	25	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Selenium	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Silver	ND	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Thallium	ND	mg/kg	1.9		1	0.9	07/12/10	07/12/10 18:05	1034
Tin	ND	mg/kg	4.7		1	2.4	07/12/10	07/12/10 18:05	1034
Vanadium	23	mg/kg	2.4		1	1.2	07/12/10	07/12/10 18:05	1034
Zinc	97	mg/kg	9.4		1	4.7	07/12/10	07/15/10 01:02	1034

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CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW12-SO-22 to 24 **Date/Time Sampled: 07/06/2010 12:15** **PSS Sample ID: 10070802-003**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 79**

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
gamma-BHC (Lindane)	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
beta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
delta-BHC	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Heptachlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Aldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Heptachlor epoxide	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
gamma-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
alpha-Chlordane	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
4,4-DDE	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Endosulfan I	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Dieldrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Endrin	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
4,4-DDD	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Endosulfan II	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
4,4-DDT	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Endrin aldehyde	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Methoxychlor	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Endosulfan sulfate	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Endrin ketone	ND	ug/kg	24		1	12	07/09/10	07/12/10 19:59	1029
Toxaphene	ND	ug/kg	240		1	120	07/09/10	07/12/10 19:59	1029
Chlordane	ND	ug/kg	240		1	120	07/09/10	07/12/10 19:59	1029

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CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
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Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW12-SO-22 to 24 **Date/Time Sampled: 07/06/2010 12:15** **PSS Sample ID: 10070802-003**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 79**

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 16:59	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	250		1	120	07/13/10	07/14/10 22:55	1029
2,4,5-TP (Silvex)	ND	ug/kg	25		1	12	07/13/10	07/14/10 22:55	1029
2,4,5-T	ND	ug/kg	25		1	12	07/13/10	07/14/10 22:55	1029
Dinoseb	ND	ug/kg	120		1	62	07/13/10	07/14/10 22:55	1029

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Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Chloromethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Vinyl Chloride	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Bromomethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Chloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Acetone	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011
Trichlorofluoromethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,1-Dichloroethene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Methylene chloride	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,1-Dichloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Vinyl acetate	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
2-Butanone (MEK)	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Bromochloromethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Chloroform	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
2,2-Dichloropropane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,2-Dichloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,1-Dichloropropene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Carbon tetrachloride	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Benzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Dibromomethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,2-Dichloropropane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Carbon Disulfide	ND	ug/kg	10		1	5.2	07/09/10	07/09/10 12:39	1011
Trichloroethene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Acrylonitrile	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011
Bromodichloromethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW12-SO-22 to 24 **Date/Time Sampled: 07/06/2010 12:15** **PSS Sample ID: 10070802-003**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 79**

Volatile Organic Compounds

Analytical Method: SW846 8260B

Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Toluene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,3-Dichloropropane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
2-Hexanone (MBK)	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011
1,2-Dibromoethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Dibromochloromethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Acrolein	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Bromoform	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Tetrachloroethene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Chlorobenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Ethylbenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
m&p-Xylene	ND	ug/kg	10		1	5.2	07/09/10	07/09/10 12:39	1011
Styrene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
o-Xylene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	42		1	21	07/09/10	07/09/10 12:39	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Iodomethane	ND	ug/kg	21		1	10	07/09/10	07/09/10 12:39	1011
Naphthalene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.6	07/09/10	07/09/10 12:39	1011
Heptanal (TIC)	9	ug/kg	10		1	5.2	07/09/10	07/09/10 12:39	1011
Octanal (TIC)	25	ug/kg	10		1	5.2	07/09/10	07/09/10 12:39	1011
Nonanal (TIC)	9	ug/kg	10		1	5.2	07/09/10	07/09/10 12:39	1011

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 Project Location: Rockville, MD

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Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 79**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Hexanal (TIC)	12	ug/kg	10		1	5.2	07/09/10	07/09/10 12:39	1011

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Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Acenaphthylene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Acetophenone	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Anthracene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Benzo(a)anthracene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Benzo(a)pyrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Benzo(b)fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Benzo(g,h,i)perylene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Benzo(k)fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Benzyl butyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
bis(2-chloroethyl) ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
4-Bromophenylphenyl ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Di-n-butyl phthalate	ND	ug/kg	420		1	210	07/09/10	07/14/10 19:55	1014
4-Chloro-3-methylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
4-Chloroaniline	ND	ug/kg	420		1	210	07/09/10	07/14/10 19:55	1014
2-Chloronaphthalene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2-Chlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Chrysene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Dibenz(a,h)anthracene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Dibenzofuran	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
3,3-Dichlorobenzidine	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2,4-Dichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Diethyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Dimethyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2,4-Dimethylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014

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Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	420		1	210	07/09/10	07/14/10 19:55	1014
2,4-Dinitrotoluene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2,6-Dinitrotoluene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Fluorene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Hexachlorobenzene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Hexachlorobutadiene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Hexachlorocyclopentadiene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Hexachloroethane	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Isophorone	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2-Methylnaphthalene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2-Methylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
3&4-Methylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
4-Nitroaniline	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
3-Nitroaniline	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2-Nitroaniline	ND	ug/kg	420		1	210	07/09/10	07/14/10 19:55	1014
Nitrobenzene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2-Nitrophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
4-Nitrophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
N-Nitrosodimethylamine	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
N-Nitrosodiphenylamine	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Di-n-octyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Pentachlorophenol	ND	ug/kg	420		1	210	07/09/10	07/14/10 19:55	1014
Phenanthrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Phenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Pyrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-MW12-SO-22 to 24 **Date/Time Sampled: 07/06/2010 12:15** **PSS Sample ID: 10070802-003**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 79**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
2,4,5-Trichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
Erucylamide (TIC)	180	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014
9-Octadecenamide, (Z)- (TIC)	2,100	ug/kg	210		1	110	07/09/10	07/14/10 19:55	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.2		1	1.6	07/12/10	07/12/10 16:30	1022

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4	Date/Time Sampled: 07/06/2010 12:00	PSS Sample ID: 10070802-004
Matrix: SOIL	Date/Time Received: 07/08/2010 11:50	% Solids: 78

Organochlorine Pesticides

Analytical Method: SW846 8081B

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
alpha-BHC	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
gamma-BHC (Lindane)	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
beta-BHC	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
delta-BHC	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Heptachlor	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Aldrin	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Heptachlor epoxide	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
gamma-Chlordane	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
alpha-Chlordane	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
4,4-DDE	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Endosulfan I	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Dieldrin	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Endrin	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
4,4-DDD	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Endosulfan II	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
4,4-DDT	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Endrin aldehyde	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Methoxychlor	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Endosulfan sulfate	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Endrin ketone	ND	ug/kg	25		1	12	07/09/10	07/12/10 20:27	1029
Toxaphene	ND	ug/kg	250		1	120	07/09/10	07/12/10 20:27	1029
Chlordane	ND	ug/kg	250		1	120	07/09/10	07/12/10 20:27	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4	Date/Time Sampled: 07/06/2010 12:00	PSS Sample ID: 10070802-004
Matrix: SOIL	Date/Time Received: 07/08/2010 11:50	% Solids: 78

Polychlorinated Biphenyls

Analytical Method: SW846 8082A

Preparation Method: SW846 3550

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
PCB-1016	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029
PCB-1221	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029
PCB-1232	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029
PCB-1242	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029
PCB-1248	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029
PCB-1254	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029
PCB-1260	ND	mg/kg	0.1		1	0.1	07/08/10	07/09/10 15:02	1029

Chlorinated Herbicides

Analytical Method: SW846 8151A

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-D	ND	ug/kg	250		1	130	07/13/10	07/14/10 22:23	1029
2,4,5-TP (Silvex)	ND	ug/kg	25		1	13	07/13/10	07/14/10 22:23	1029
2,4,5-T	ND	ug/kg	25		1	13	07/13/10	07/14/10 22:23	1029
Dinoseb	ND	ug/kg	130		1	63	07/13/10	07/14/10 22:23	1029

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4 **Date/Time Sampled: 07/06/2010 12:00** **PSS Sample ID: 10070802-004**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 78**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Chloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Vinyl Chloride	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Bromomethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Chloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Acetone	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011
Trichlorofluoromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,1-Dichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Methylene chloride	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
trans-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,1-Dichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Vinyl acetate	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
2-Butanone (MEK)	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011
cis-1,2-Dichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Bromochloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Chloroform	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
2,2-Dichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,1,1-Trichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,2-Dichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,1-Dichloropropene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Carbon tetrachloride	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Benzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Dibromomethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,2-Dichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Carbon Disulfide	ND	ug/kg	11		1	5.3	07/09/10	07/09/10 13:08	1011
Trichloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Acrylonitrile	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011
Bromodichloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
cis-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
4-Methyl-2-Pentanone (MIBK)	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4 **Date/Time Sampled: 07/06/2010 12:00** **PSS Sample ID: 10070802-004**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 78**

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
trans-1,3-Dichloropropene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,1,2-Trichloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Toluene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,3-Dichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
2-Hexanone (MBK)	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011
1,2-Dibromoethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Dibromochloromethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Acrolein	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011
1,1,1,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Bromoform	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
trans-1,4-dichloro-2-butene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Tetrachloroethene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Chlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Ethylbenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
m&p-Xylene	ND	ug/kg	11		1	5.3	07/09/10	07/09/10 13:08	1011
Styrene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
o-Xylene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,2,3-Trichloropropane	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,3-Dichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,4-Dichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,2-Dichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,2-Dibromo-3-chloropropane	ND	ug/kg	43		1	21	07/09/10	07/09/10 13:08	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Iodomethane	ND	ug/kg	21		1	11	07/09/10	07/09/10 13:08	1011
Naphthalene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5		1	2.7	07/09/10	07/09/10 13:08	1011
Octanal (TIC)	33	ug/kg	11		1	5.3	07/09/10	07/09/10 13:08	1011
Nonanal (TIC)	15	ug/kg	11		1	5.3	07/09/10	07/09/10 13:08	1011
Hexanal (TIC)	12	ug/kg	11		1	5.3	07/09/10	07/09/10 13:08	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4	Date/Time Sampled: 07/06/2010 12:00	PSS Sample ID: 10070802-004
Matrix: SOIL	Date/Time Received: 07/08/2010 11:50	% Solids: 78

Volatile Organic Compounds Analytical Method: SW846 8260B Preparation Method: SW846 5035A

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Heptanal (TIC)	10	ug/kg	11		1	5.3	07/09/10	07/09/10 13:08	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4 **Date/Time Sampled: 07/06/2010 12:00** **PSS Sample ID: 10070802-004**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 78**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Acenaphthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Acenaphthylene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Acetophenone	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Anthracene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Benzo(a)anthracene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Benzo(a)pyrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Benzo(b)fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Benzo(g,h,i)perylene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Benzo(k)fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Benzyl butyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
bis(2-chloroethoxy) methane	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
bis(2-chloroethyl) ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
bis(2-chloroisopropyl) ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
bis(2-ethylhexyl) phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
4-Bromophenylphenyl ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Di-n-butyl phthalate	ND	ug/kg	430		1	210	07/09/10	07/14/10 20:25	1014
4-Chloro-3-methylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
4-Chloroaniline	ND	ug/kg	430		1	210	07/09/10	07/14/10 20:25	1014
2-Chloronaphthalene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2-Chlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
4-Chlorophenyl phenyl ether	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Chrysene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Dibenz(a,h)anthracene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Dibenzofuran	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
3,3-Dichlorobenzidine	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2,4-Dichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Diethyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Dimethyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2,4-Dimethylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
4,6-Dinitro-2-methyl phenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014

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 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802

EA Engineering, Sparks, MD

July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4 **Date/Time Sampled: 07/06/2010 12:00** **PSS Sample ID: 10070802-004**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 78**

Semivolatile Organic Compounds

Analytical Method: SW846 8270C

Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	ND	ug/kg	430		1	210	07/09/10	07/14/10 20:25	1014
2,4-Dinitrotoluene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2,6-Dinitrotoluene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Fluoranthene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Fluorene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Hexachlorobenzene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Hexachlorobutadiene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Hexachlorocyclopentadiene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Hexachloroethane	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Indeno(1,2,3-c,d)pyrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Isophorone	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2-Methylnaphthalene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2-Methylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
3&4-Methylphenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
4-Nitroaniline	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
3-Nitroaniline	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2-Nitroaniline	ND	ug/kg	430		1	210	07/09/10	07/14/10 20:25	1014
Nitrobenzene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2-Nitrophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
4-Nitrophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
N-Nitrosodimethylamine	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
N-Nitrosodi-n-propylamine	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
N-Nitrosodiphenylamine	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Di-n-octyl phthalate	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Pentachlorophenol	ND	ug/kg	430		1	210	07/09/10	07/14/10 20:25	1014
Phenanthrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Phenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
Pyrene	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2,3,4,6-Tetrachlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014

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 ROUTE 40 WEST
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 410-747-8770
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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 10070802
 EA Engineering, Sparks, MD
 July 28, 2010

Project Name: Gude Landfill
 Project Location: Rockville, MD

Sample ID: Gude-SO-DUP4 **Date/Time Sampled: 07/06/2010 12:00** **PSS Sample ID: 10070802-004**
Matrix: SOIL **Date/Time Received: 07/08/2010 11:50** **% Solids: 78**

Semivolatile Organic Compounds Analytical Method: SW846 8270C Preparation Method: SW846 3550

Library search was performed and TICs (if any) are listed below, values of TICs are estimated

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
2,4,6-Trichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
2,4,5-Trichlorophenol	ND	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014
9-Octadecenamide, (Z)- (TIC)	1,200	ug/kg	210		1	110	07/09/10	07/14/10 20:25	1014

Cyanide Analytical Method: SW846 9014

	Result	Units	RL	Flag	Dil	LOD	Prepared	Analyzed	Analyst
Cyanide, Total	ND	mg/kg	3.2		1	1.6	07/12/10	07/12/10 16:30	1022



Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number 10070802 **Received By** Rachel Davis
Client Name EA Engineering **Date Received** 07/08/2010 11:50:00 AM
Project Name Gude Landfill **Delivered By** Client
Project Number N/A **Tracking No** Not Applicable
Disposal Date: 09/06/2010 **Logged In By** Rachel Davis

Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seals	Not Applicable	Temp (deg C)	5
Seal Condition	Not Applicable	Temp Blank Present	No

Documentation

COC agrees with sample labels? Yes or No Sampler Name: Joseph Sawicki
Chain of Custody (COC) Yes or No MD DW Cert. No : NIA

Sample Container

Appropriate for Specified Analysis? Yes No Custody Seal(s) Absent
Intact? Custody Seal(s) Intact? Not Applicable
Labeled and Labels Legible Seal(s) Signed / Dated Not Applicable
Total No. of Samples Received 4 Total No. of Containers Received 32

Preservation

	Yes	No	N/A
Metals (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cyanides (pH>12)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sulfide (pH>9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOC, COD, Phenols (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TOX, TKN, NH3, Total Phos (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOC, BTEX (VOA Vials Rcvd Preserved) (pH<2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do VOA vials have zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling.

Samples Inspected/Checklist Completed By: [Signature] Date: 7/8/10
PM Review and Approval: _____ Date: _____

Analytical Data Package Information Summary for W.O 10070802

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
AD2216A	Gude-MW12-SO-22 to 24	Initial	10070802-003	1041	S	83516	83516	07/06/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-MW4-SO-2 to 4	Initial	10070802-001	1041	S	83516	83516	07/06/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-MW9-SO-20 to 22	Initial	10070802-002	1041	S	83516	83516	07/06/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-SO-DUP4	Initial	10070802-004	1041	S	83516	83516	07/06/2010	07/08/2010	07/09/2010	07/09/2010
SW846 6020	33518-1-BKS	BKS	33518-1-BKS	1034	S	33518	83559	-----	07/08/2010	07/12/2010	07/12/2010
	33518-1-BLK	BLK	33518-1-BLK	1034	S	33518	83559	-----	07/08/2010	07/12/2010	07/12/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1034	S	33518	83559	06/29/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1034	S	33518	83559	06/29/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW12-SO-22 to 24	Initial	10070802-003	1034	S	33518	83559	07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW4-SO-2 to 4	Initial	10070802-001	1034	S	33518	83559	07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW9-SO-20 to 22	Initial	10070802-002	1034	S	33518	83559	07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-SO-DUP4	Initial	10070802-004	1034	S	33518	83559	07/06/2010	07/08/2010	07/12/2010	07/12/2010
	33518-1-BKS	BKS	33518-1-BKS	1034	S	33518	83620	-----	07/08/2010	07/12/2010	07/14/2010
	33518-1-BLK	BLK	33518-1-BLK	1034	S	33518	83620	-----	07/08/2010	07/12/2010	07/14/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1034	S	33518	83620	06/29/2010	07/08/2010	07/12/2010	07/14/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1034	S	33518	83620	06/29/2010	07/08/2010	07/12/2010	07/14/2010
SW846 8081B	Gude-MW12-SO-22 to 24 DL	Reanalysis	10070802-003	1034	S	33518	83620	07/06/2010	07/08/2010	07/12/2010	07/15/2010
	Gude-MW4-SO-2 to 4 DL	Reanalysis	10070802-001	1034	S	33518	83620	07/06/2010	07/08/2010	07/12/2010	07/15/2010
	Gude-MW9-SO-20 to 22 DL	Reanalysis	10070802-002	1034	S	33518	83620	07/06/2010	07/08/2010	07/12/2010	07/15/2010
	Gude-SO-DUP4 DL	Reanalysis	10070802-004	1034	S	33518	83620	07/06/2010	07/08/2010	07/12/2010	07/15/2010
	33515-1-BKS	BKS	33515-1-BKS	1029	S	33515	83560	-----	07/08/2010	07/09/2010	07/12/2010
	33515-1-BLK	BLK	33515-1-BLK	1029	S	33515	83560	-----	07/08/2010	07/09/2010	07/12/2010

Analytical Data Package Information Summary for W.O 10070802

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mix	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8081B	33515-1-BSD	BSD	33515-1-BSD	1029	S	33515	83560	-----	07/08/2010	07/09/2010	07/12/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1029	S	33515	83560	06/29/2010	07/08/2010	07/09/2010	07/12/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1029	S	33515	83560	06/29/2010	07/08/2010	07/09/2010	07/12/2010
	Gude-MW12-SO-22 to 24	Initial	10070802-003	1029	S	33515	83560	07/06/2010	07/08/2010	07/09/2010	07/12/2010
	Gude-MW4-SO-2 to 4	Initial	10070802-001	1029	S	33515	83560	07/06/2010	07/08/2010	07/09/2010	07/12/2010
	Gude-MW9-SO-20 to 22	Initial	10070802-002	1029	S	33515	83560	07/06/2010	07/08/2010	07/09/2010	07/12/2010
	Gude-SO-DUP4	Initial	10070802-004	1029	S	33515	83560	07/06/2010	07/08/2010	07/09/2010	07/12/2010
	33502-1-BKS	BKS	33502-1-BKS	1029	S	33502	83553	-----	07/08/2010	07/08/2010	07/09/2010
	33502-1-BLK	BLK	33502-1-BLK	1029	S	33502	83553	-----	07/08/2010	07/08/2010	07/09/2010
	33502-1-BSD	BSD	33502-1-BSD	1029	S	33502	83553	-----	07/08/2010	07/08/2010	07/09/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1029	S	33502	83553	06/29/2010	07/08/2010	07/08/2010	07/09/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1029	S	33502	83553	06/29/2010	07/08/2010	07/08/2010	07/09/2010
Gude-MW12-SO-22 to 24	Initial	10070802-003	1029	S	33502	83553	07/06/2010	07/08/2010	07/08/2010	07/09/2010	
Gude-MW4-SO-2 to 4	Initial	10070802-001	1029	S	33502	83553	07/06/2010	07/08/2010	07/08/2010	07/09/2010	
Gude-MW9-SO-20 to 22	Initial	10070802-002	1029	S	33502	83553	07/06/2010	07/08/2010	07/08/2010	07/09/2010	
Gude-SO-DUP4	Initial	10070802-004	1029	S	33502	83553	07/06/2010	07/08/2010	07/08/2010	07/09/2010	
SW846 8151A	33537-1-BKS	BKS	33537-1-BKS	1029	S	33537	83635	-----	07/08/2010	07/13/2010	07/14/2010
	33537-1-BLK	BLK	33537-1-BLK	1029	S	33537	83635	-----	07/08/2010	07/13/2010	07/14/2010
	33537-1-BSD	BSD	33537-1-BSD	1029	S	33537	83635	-----	07/08/2010	07/13/2010	07/14/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1029	S	33537	83635	06/29/2010	07/08/2010	07/13/2010	07/14/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1029	S	33537	83635	06/29/2010	07/08/2010	07/13/2010	07/14/2010
	Gude-MW12-SO-22 to 24	Initial	10070802-003	1029	S	33537	83635	07/06/2010	07/08/2010	07/13/2010	07/14/2010

Analytical Data Package Information Summary for W.O 10070802

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mix	Prep Batch	Analytical Batch	Sampled	Received	Prepared	Analyzed
SW846 8151A	Gude-MW4-SO-2 to 4	Initial	10070802-001	1029	S	33537	83635	07/06/2010	07/08/2010	07/13/2010	07/14/2010
	Gude-MW9-SO-20 to 22	Initial	10070802-002	1029	S	33537	83635	07/06/2010	07/08/2010	07/13/2010	07/14/2010
	Gude-SO-DUP4	Initial	10070802-004	1029	S	33537	83635	07/06/2010	07/08/2010	07/13/2010	07/14/2010
	33519-1-BKS	BKS	33519-1-BKS	1011	S	33519	83535	-----	07/08/2010	07/09/2010	07/09/2010
SW846 8260B	33519-1-BLK	BLK	33519-1-BLK	1011	S	33519	83535	-----	07/08/2010	07/09/2010	07/09/2010
	33519-1-BSD	BSD	33519-1-BSD	1011	S	33519	83535	-----	07/08/2010	07/09/2010	07/09/2010
	Gude-MW12-SO-22 to 24	Initial	10070802-003	1011	S	33519	83535	07/06/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-MW4-SO-2 to 4	Initial	10070802-001	1011	S	33519	83535	07/06/2010	07/08/2010	07/09/2010	07/09/2010
SW846 8270C	Gude-MW9-SO-20 to 22	Initial	10070802-002	1011	S	33519	83535	07/06/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-SO-DUP4	Initial	10070802-004	1011	S	33519	83535	07/06/2010	07/08/2010	07/09/2010	07/09/2010
	33507-1-BKS	BKS	33507-1-BKS	1014	S	33507	83607	-----	07/08/2010	07/09/2010	07/09/2010
	33507-1-BLK	BLK	33507-1-BLK	1014	S	33507	83607	-----	07/08/2010	07/09/2010	07/09/2010
SW846 9014	33507-1-BSD	BSD	33507-1-BSD	1014	S	33507	83607	-----	07/08/2010	07/09/2010	07/09/2010
	Gude-MW11A-SO-14 to 16 S	MS	10070220-001 S	1014	S	33507	83607	06/29/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-MW11A-SO-14 to 16 SD	MSD	10070220-001 SD	1014	S	33507	83607	06/29/2010	07/08/2010	07/09/2010	07/09/2010
	Gude-MW12-SO-22 to 24	Initial	10070802-003	1014	S	33507	83643	07/06/2010	07/08/2010	07/09/2010	07/14/2010
SW846 9014	Gude-MW4-SO-2 to 4	Initial	10070802-001	1014	S	33507	83643	07/06/2010	07/08/2010	07/09/2010	07/14/2010
	Gude-MW9-SO-20 to 22	Initial	10070802-002	1014	S	33507	83643	07/06/2010	07/08/2010	07/09/2010	07/14/2010
	Gude-SO-DUP4	Initial	10070802-004	1014	S	33507	83643	07/06/2010	07/08/2010	07/09/2010	07/14/2010
	83556-1-BKS	BKS	83556-1-BKS	1022	S	83556	83556	-----	07/08/2010	07/12/2010	07/12/2010
SW846 9014	83556-1-BLK	BLK	83556-1-BLK	1022	S	83556	83556	-----	07/08/2010	07/12/2010	07/12/2010
	83556-1-BSD	BSD	83556-1-BSD	1022	S	83556	83556	-----	07/08/2010	07/12/2010	07/12/2010
	Gude-MW12-SO-22 to 24	Initial	10070802-003	1022	S	83556	83556	07/06/2010	07/08/2010	07/12/2010	07/12/2010

Analytical Data Package Information Summary for W.O 10070802

Report Prepared For: EA Engineering, Sparks, MD
 Project Name: Gude Landfill
 Project Manager: Pete Lekas



Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mix	Prep Batch	Analytical Batch	Batch	Sampled	Received	Prepared	Analyzed
SW846 9014	Gude-MW4-SO-2 to 4	Initial	10070802-001	1022	S	83556	83556		07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW9-SO-20 to 22	Initial	10070802-002	1022	S	83556	83556		07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW9-SO-20 to 22 S	MS	10070802-002 S	1022	S	83556	83556		07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-MW9-SO-20 to 22 SD	MSD	10070802-002 SD	1022	S	83556	83556		07/06/2010	07/08/2010	07/12/2010	07/12/2010
	Gude-SO-DUP4	Initial	10070802-004	1022	S	83556	83556		07/06/2010	07/08/2010	07/12/2010	07/12/2010



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33518-1-BLK Matrix: SOLID
Lab Sample Id: 33518-1-BLK

Analytical Method: SW846 6020 Prep Method: SW3050B
Date Analyzed: Jul-12-10 16:34 Analyst: 1034 Date Prep: Jul-12-10 08:29 Tech: 1034
Seq Number: 83559

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	2.5	1.3	mg/kg	U	1
Arsenic	7440-38-2	ND	0.5	0.3	mg/kg	U	1
Barium	7440-39-3	ND	2.5	1.3	mg/kg	U	1
Beryllium	7440-41-7	ND	2.5	1.3	mg/kg	U	1
Cadmium	7440-43-9	ND	2.5	1.3	mg/kg	U	1
Chromium	7440-47-3	ND	2.5	1.3	mg/kg	U	1
Cobalt	7440-48-4	ND	2.5	1.3	mg/kg	U	1
Copper	7440-50-8	ND	2.5	1.3	mg/kg	U	1
Lead	7439-92-1	ND	2.5	1.3	mg/kg	U	1
Mercury	7439-97-6	ND	0.10	0.05	mg/kg	U	1
Nickel	7440-02-0	ND	2.5	1.3	mg/kg	U	1
Selenium	7782-49-2	ND	2.5	1.3	mg/kg	U	1
Silver	7440-22-4	ND	2.5	1.3	mg/kg	U	1
Thallium	7440-28-0	ND	2.0	1.0	mg/kg	U	1
Tin	7440-31-5	ND	5.0	2.5	mg/kg	U	1
Vanadium	7440-62-2	ND	2.5	1.3	mg/kg	U	1
Zinc	7440-66-6	ND	10	5.0	mg/kg	U	1

Analytical Method: SW846 6020 Prep Method: SW3050B
Date Analyzed: Jul-14-10 23:32 Analyst: 1034 Date Prep: Jul-12-10 08:29 Tech: 1034
Seq Number: 83620

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Antimony	7440-36-0	ND	2.5	1.3	mg/kg	U	1
Arsenic	7440-38-2	ND	0.5	0.3	mg/kg	U	1
Barium	7440-39-3	ND	2.5	1.3	mg/kg	U	1
Beryllium	7440-41-7	ND	2.5	1.3	mg/kg	U	1
Cadmium	7440-43-9	ND	2.5	1.3	mg/kg	U	1
Chromium	7440-47-3	ND	2.5	1.3	mg/kg	U	1
Cobalt	7440-48-4	ND	2.5	1.3	mg/kg	U	1
Copper	7440-50-8	ND	2.5	1.3	mg/kg	U	1
Lead	7439-92-1	ND	2.5	1.3	mg/kg	U	1
Mercury	7439-97-6	ND	0.10	0.05	mg/kg	U	1
Nickel	7440-02-0	ND	2.5	1.3	mg/kg	U	1
Selenium	7782-49-2	ND	2.5	1.3	mg/kg	U	1
Silver	7440-22-4	ND	2.5	1.3	mg/kg	U	1
Thallium	7440-28-0	ND	2.0	1.0	mg/kg	U	1
Tin	7440-31-5	ND	5.0	2.5	mg/kg	U	1
Vanadium	7440-62-2	ND	2.5	1.3	mg/kg	U	1
Zinc	7440-66-6	ND	10	5.0	mg/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33515-1-BLK
Lab Sample Id: 33515-1-BLK

Matrix: SOLID

Analytical Method: SW846 8081B

Prep Method: SW3550

Date Analyzed: Jul-12-10 14:51

Analyst: 1029

Date Prep: Jul-09-10 16:41

Tech: 1016

Seq Number: 83560

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
alpha-BHC	319-84-6	ND	20	9.9	ug/kg	U	1
gamma-BHC (Lindane)	58-89-9	ND	20	9.9	ug/kg	U	1
beta-BHC	319-85-7	ND	20	9.9	ug/kg	U	1
delta-BHC	319-86-8	ND	20	9.9	ug/kg	U	1
Heptachlor	76-44-8	ND	20	9.9	ug/kg	U	1
Aldrin	309-00-2	ND	20	9.9	ug/kg	U	1
Heptachlor epoxide	1024-57-3	ND	20	9.9	ug/kg	U	1
gamma-Chlordane	5103-74-2	ND	20	9.9	ug/kg	U	1
alpha-Chlordane	5103-71-9	ND	20	9.9	ug/kg	U	1
4,4-DDE	72-55-9	ND	20	9.9	ug/kg	U	1
Endosulfan I	959-98-8	ND	20	9.9	ug/kg	U	1
Dieldrin	60-57-1	ND	20	9.9	ug/kg	U	1
Endrin	72-20-8	ND	20	9.9	ug/kg	U	1
4,4-DDD	72-54-8	ND	20	9.9	ug/kg	U	1
Endosulfan II	33213-65-9	ND	20	9.9	ug/kg	U	1
4,4-DDT	50-29-3	ND	20	9.9	ug/kg	U	1
Endrin aldehyde	7421-93-4	ND	20	9.9	ug/kg	U	1
Methoxychlor	72-43-5	ND	20	9.9	ug/kg	U	1
Endosulfan sulfate	1031-07-8	ND	20	9.9	ug/kg	U	1
Endrin ketone	53494-70-5	ND	20	9.9	ug/kg	U	1
Toxaphene	8001-35-2	ND	200	99	ug/kg	U	1
Chlordane	57-74-9	ND	200	99	ug/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: **33502-1-BLK** Matrix: **SOLID**
Lab Sample Id: **33502-1-BLK**

Analytical Method: **SW846 8082A** Prep Method: **SW3550**
Date Analyzed: Jul-09-10 10:40 Analyst: 1029 Date Prep: Jul-08-10 16:01 Tech: 1016
Seq Number: 83553

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
PCB-1016	12674-11-2	ND	0.1	0.0495	mg/kg	U	1
PCB-1221	11104-28-2	ND	0.1	0.0495	mg/kg	U	1
PCB-1232	11141-16-5	ND	0.1	0.0495	mg/kg	U	1
PCB-1242	53469-21-9	ND	0.1	0.0495	mg/kg	U	1
PCB-1248	12672-29-6	ND	0.1	0.0495	mg/kg	U	1
PCB-1254	11097-69-1	ND	0.1	0.0495	mg/kg	U	1
PCB-1260	11096-82-5	ND	0.1	0.0495	mg/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33537-1-BLK
Lab Sample Id: 33537-1-BLK

Matrix: SOLID

Analytical Method: SW846 8151A

Prep Method: SW8151A_PREP

Date Analyzed: Jul-14-10 16:59

Analyst: 1029

Date Prep: Jul-13-10 06:43

Tech: 1028

Seq Number: 83635

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2,4-D	94-75-7	ND	200	100	ug/kg	U	1
2,4,5-TP (Silvex)	93-72-1	ND	20	10	ug/kg	U	1
2,4,5-T	93-76-5	ND	20	10	ug/kg	U	1
Dinoseb	88-85-7	ND	100	50	ug/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33519-1-BLK
Lab Sample Id: 33519-1-BLK

Matrix: SOLID

Analytical Method: SW846 8260B

Prep Method: SW5035

Date Analyzed: Jul-09-10 11:01

Analyst: 1011

Date Prep: Jul-09-10 08:57

Tech: 1011

Seq Number: 83535

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Dichlorodifluoromethane	75-71-8	ND	5	2.6	ug/kg	U	1
Chloromethane	74-87-3	ND	5	2.6	ug/kg	U	1
Vinyl Chloride	75-01-4	ND	5	2.6	ug/kg	U	1
Bromomethane	74-83-9	ND	5	2.6	ug/kg	U	1
Chloroethane	75-00-3	ND	5	2.6	ug/kg	U	1
Acetone	67-64-1	ND	21	10	ug/kg	U	1
Trichlorofluoromethane	75-69-4	ND	5	2.6	ug/kg	U	1
1,1-Dichloroethene	75-35-4	ND	5	2.6	ug/kg	U	1
Methylene chloride	75-09-2	ND	5	2.6	ug/kg	U	1
trans-1,2-Dichloroethene	156-60-5	ND	5	2.6	ug/kg	U	1
1,1-Dichloroethane	75-34-3	ND	5	2.6	ug/kg	U	1
Vinyl acetate	108-05-4	ND	5	2.6	ug/kg	U	1
2-Butanone (MEK)	78-93-3	ND	21	10	ug/kg	U	1
cis-1,2-Dichloroethene	156-59-2	ND	5	2.6	ug/kg	U	1
Bromochloromethane	74-97-5	ND	5	2.6	ug/kg	U	1
Chloroform	67-66-3	ND	5	2.6	ug/kg	U	1
2,2-Dichloropropane	594-20-7	ND	5	2.6	ug/kg	U	1
1,1,1-Trichloroethane	71-55-6	ND	5	2.6	ug/kg	U	1
1,2-Dichloroethane	107-06-2	ND	5	2.6	ug/kg	U	1
1,1-Dichloropropene	563-58-6	ND	5	2.6	ug/kg	U	1
Carbon tetrachloride	56-23-5	ND	5	2.6	ug/kg	U	1
Benzene	71-43-2	ND	5	2.6	ug/kg	U	1
Dibromomethane	74-95-3	ND	5	2.6	ug/kg	U	1
1,2-Dichloropropane	78-87-5	ND	5	2.6	ug/kg	U	1
Carbon Disulfide	75-15-0	ND	10	5.1	ug/kg	U	1
Trichloroethene	79-01-6	ND	5	2.6	ug/kg	U	1
Acrylonitrile	107-13-1	ND	21	10	ug/kg	U	1
Bromodichloromethane	75-27-4	ND	5	2.6	ug/kg	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	5	2.6	ug/kg	U	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	ND	21	10	ug/kg	U	1
trans-1,3-Dichloropropene	10061-02-6	ND	5	2.6	ug/kg	U	1
1,1,2-Trichloroethane	79-00-5	ND	5	2.6	ug/kg	U	1
Toluene	108-88-3	ND	5	2.6	ug/kg	U	1
1,3-Dichloropropane	142-28-9	ND	5	2.6	ug/kg	U	1
2-Hexanone (MBK)	591-78-6	ND	21	10	ug/kg	U	1
1,2-Dibromoethane	106-93-4	ND	5	2.6	ug/kg	U	1
Dibromochloromethane	124-48-1	ND	5	2.6	ug/kg	U	1
Acrolein	107-02-8	ND	21	10	ug/kg	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	5	2.6	ug/kg	U	1
Bromoform	75-25-2	ND	5	2.6	ug/kg	U	1
trans-1,4-dichloro-2-butene	110-57-6	ND	5	2.6	ug/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33519-1-BLK
Lab Sample Id: 33519-1-BLK

Matrix: SOLID

Analytical Method: SW846 8260B

Prep Method: SW5035

Date Analyzed: Jul-09-10 11:01

Analyst: 1011

Date Prep: Jul-09-10 08:57

Tech: 1011

Seq Number: 83535

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Tetrachloroethene	127-18-4	ND	5	2.6	ug/kg	U	1
Chlorobenzene	108-90-7	ND	5	2.6	ug/kg	U	1
Ethylbenzene	100-41-4	ND	5	2.6	ug/kg	U	1
m&p-Xylene	108-38-3	ND	10	5.1	ug/kg	U	1
Styrene	100-42-5	ND	5	2.6	ug/kg	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	2.6	ug/kg	U	1
o-Xylene	95-47-6	ND	5	2.6	ug/kg	U	1
1,2,3-Trichloropropane	96-18-4	ND	5	2.6	ug/kg	U	1
1,3-Dichlorobenzene	541-73-1	ND	5	2.6	ug/kg	U	1
1,4-Dichlorobenzene	106-46-7	ND	5	2.6	ug/kg	U	1
1,2-Dichlorobenzene	95-50-1	ND	5	2.6	ug/kg	U	1
1,2-Dibromo-3-chloropropane	96-12-8	ND	41	21	ug/kg	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	5	2.6	ug/kg	U	1
Iodomethane	74-88-4	ND	21	10	ug/kg	U	1
Naphthalene	91-20-3	ND	5	2.6	ug/kg	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	5	2.6	ug/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33507-1-BLK
Lab Sample Id: 33507-1-BLK

Matrix: SOLID

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jul-09-10 15:36

Analyst: 1014

Date Prep: Jul-09-10 09:33

Tech: 1022

Seq Number: 83607

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Acenaphthene	83-32-9	U	166.6	83.31	ug/kg	U	1
Acenaphthylene	208-96-8	U	166.6	83.31	ug/kg	U	1
Acetophenone	98-86-2	U	166.6	83.31	ug/kg	U	1
Anthracene	120-12-7	U	166.6	83.31	ug/kg	U	1
Benzo(a)anthracene	56-55-3	U	166.6	83.31	ug/kg	U	1
Benzo(a)pyrene	50-32-8	U	166.6	83.31	ug/kg	U	1
Benzo(b)fluoranthene	205-99-2	U	166.6	83.31	ug/kg	U	1
Benzo(g,h,i)perylene	191-24-2	U	166.6	83.31	ug/kg	U	1
Benzo(k)fluoranthene	207-08-9	U	166.6	83.31	ug/kg	U	1
Benzyl butyl phthalate	85-68-7	U	166.6	83.31	ug/kg	U	1
bis(2-chloroethoxy) methane	111-91-1	U	166.6	83.31	ug/kg	U	1
bis(2-chloroethyl) ether	111-44-4	U	166.6	83.31	ug/kg	U	1
bis(2-chloroisopropyl) ether	108-60-1	U	166.6	83.31	ug/kg	U	1
bis(2-ethylhexyl) phthalate	117-81-7	U	166.6	83.31	ug/kg	U	1
4-Bromophenylphenyl ether	101-55-3	U	166.6	83.31	ug/kg	U	1
Di-n-butyl phthalate	84-74-2	U	333.2	166.6	ug/kg	U	1
4-Chloro-3-methylphenol	59-50-7	U	166.6	83.31	ug/kg	U	1
4-Chloroaniline	106-47-8	U	333.2	166.6	ug/kg	U	1
2-Chloronaphthalene	91-58-7	U	166.6	83.31	ug/kg	U	1
2-Chlorophenol	95-57-8	U	166.6	83.31	ug/kg	U	1
4-Chlorophenyl phenyl ether	7005-72-3	U	166.6	83.31	ug/kg	U	1
Chrysene	218-01-9	U	166.6	83.31	ug/kg	U	1
Dibenz(a,h)anthracene	53-70-3	U	166.6	83.31	ug/kg	U	1
Dibenzofuran	132-64-9	U	166.6	83.31	ug/kg	U	1
3,3-Dichlorobenzidine	91-94-1	U	166.6	83.31	ug/kg	U	1
2,4-Dichlorophenol	120-83-2	U	166.6	83.31	ug/kg	U	1
Diethyl phthalate	84-66-2	U	166.6	83.31	ug/kg	U	1
Dimethyl phthalate	131-11-3	U	166.6	83.31	ug/kg	U	1
2,4-Dimethylphenol	105-67-9	U	166.6	83.31	ug/kg	U	1
4,6-Dinitro-2-methyl phenol	534-52-1	U	166.6	83.31	ug/kg	U	1
2,4-Dinitrophenol	51-28-5	U	333.2	166.6	ug/kg	U	1
2,4-Dinitrotoluene	121-14-2	U	166.6	83.31	ug/kg	U	1
2,6-Dinitrotoluene	606-20-2	U	166.6	83.31	ug/kg	U	1
Fluoranthene	206-44-0	U	166.6	83.31	ug/kg	U	1
Fluorene	86-73-7	U	166.6	83.31	ug/kg	U	1
Hexachlorobenzene	118-74-1	U	166.6	83.31	ug/kg	U	1
Hexachlorobutadiene	87-68-3	U	166.6	83.31	ug/kg	U	1
Hexachlorocyclopentadiene	77-47-4	U	166.6	83.31	ug/kg	U	1
Hexachloroethane	67-72-1	U	166.6	83.31	ug/kg	U	1
Indeno(1,2,3-c,d)pyrene	193-39-5	U	166.6	83.31	ug/kg	U	1
Isophorone	78-59-1	U	166.6	83.31	ug/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD

Gude Landfill

Sample Id: 33507-1-BLK
Lab Sample Id: 33507-1-BLK

Matrix: SOLID

Analytical Method: SW846 8270C

Prep Method: SW3550

Date Analyzed: Jul-09-10 15:36

Analyst: 1014

Date Prep: Jul-09-10 09:33

Tech: 1022

Seq Number: 83607

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
2-Methylnaphthalene	91-57-6	U	166.6	83.31	ug/kg	U	1
2-Methylphenol	95-48-7	U	166.6	83.31	ug/kg	U	1
3&4-Methylphenol		U	166.6	83.31	ug/kg	U	1
4-Nitroaniline	100-01-6	U	166.6	83.31	ug/kg	U	1
3-Nitroaniline	99-09-2	U	166.6	83.31	ug/kg	U	1
2-Nitroaniline	88-74-4	U	333.2	166.6	ug/kg	U	1
Nitrobenzene	98-95-3	U	166.6	83.31	ug/kg	U	1
2-Nitrophenol	88-75-5	U	166.6	83.31	ug/kg	U	1
4-Nitrophenol	100-02-7	U	166.6	83.31	ug/kg	U	1
N-Nitrosodimethylamine	62-75-9	U	166.6	83.31	ug/kg	U	1
N-Nitrosodi-n-propylamine	621-64-7	U	166.6	83.31	ug/kg	U	1
N-Nitrosodiphenylamine	86-30-6	U	166.6	83.31	ug/kg	U	1
Di-n-octyl phthalate	117-84-0	U	166.6	83.31	ug/kg	U	1
1,2,4,5-Tetrachlorobenzene	95-94-3	U	166.6	83.31	ug/kg	U	1
Pentachlorophenol	87-86-5	U	333.2	166.6	ug/kg	U	1
Phenanthrene	85-01-8	U	166.6	83.31	ug/kg	U	1
Phenol	108-95-2	U	166.6	83.31	ug/kg	U	1
Pyrene	129-00-0	U	166.6	83.31	ug/kg	U	1
2,3,4,6-Tetrachlorophenol	58-90-2	U	166.6	83.31	ug/kg	U	1
2,4,6-Trichlorophenol	88-06-2	U	166.6	83.31	ug/kg	U	1
2,4,5-Trichlorophenol	95-95-4	U	166.6	83.31	ug/kg	U	1
TIC		U	166.6	83.31	ug/kg	U	1



Blank Summary 10070802

EA Engineering, Sparks, MD
Gude Landfill

Sample Id: 83556-1-BLK
Lab Sample Id: 83556-1-BLK

Matrix: SOLID

Analytical Method: SW846 9014

Prep Method:

Date Analyzed: Jul-12-10 16:30

Analyst: 1022

Date Prep:

Tech: 1022

Seq Number: 83556

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Cyanide, Total	57-12-5	ND	2.5	1.3	mg/kg	U	1



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83560

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	24.3	25.00	97	55-143	
Tetrachloro-m-xylene	21.4	25.00	85	32-133	

Lab Batch #: 83560

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	25.1	25.00	100	55-143	
Tetrachloro-m-xylene	24.1	25.00	96	32-133	

Lab Batch #: 83560

Sample: 10070802-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	5.1	5.00	102	55-143	
Tetrachloro-m-xylene	4.3	5.00	86	32-133	

Lab Batch #: 83560

Sample: 10070802-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	28.9	25.00	115	55-143	
Tetrachloro-m-xylene	23.7	25.00	95	32-133	

Lab Batch #: 83560

Sample: 10070802-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	27.3	25.00	109	55-143	
Tetrachloro-m-xylene	22.4	25.00	90	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83560

Sample: 10070802-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	25.4	25.00	101	55-143	
Tetrachloro-m-xylene	20.6	25.00	82	32-133	

Lab Batch #: 83560

Sample: 33515-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	24.9	25.00	100	55-143	
Tetrachloro-m-xylene	24.3	25.00	97	32-133	

Lab Batch #: 83560

Sample: 33515-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.4	25.00	106	55-143	
Tetrachloro-m-xylene	25.7	25.00	103	32-133	

Lab Batch #: 83560

Sample: 33515-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Organochlorine Pesticides	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	26.6	25.00	106	55-143	
Tetrachloro-m-xylene	24.8	25.00	99	32-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83553

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	22.9	25.00	92	43-124	
Tetrachloro-m-xylene	16.4	25.00	66	44-97	

Lab Batch #: 83553

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	19.9	25.00	80	43-124	
Tetrachloro-m-xylene	15.0	25.00	60	44-97	

Lab Batch #: 83553

Sample: 10070802-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	4.1	5.00	81	43-124	
Tetrachloro-m-xylene	3.2	5.00	64	44-97	

Lab Batch #: 83553

Sample: 10070802-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	29.3	25.00	117	43-124	
Tetrachloro-m-xylene	20.9	25.00	84	44-97	

Lab Batch #: 83553

Sample: 10070802-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
Decachlorobiphenyl	23.2	25.00	94	43-124	
Tetrachloro-m-xylene	18.3	25.00	73	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83553

Sample: 10070802-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	20.7	25.00	83	43-124	
Tetrachloro-m-xylene	16.8	25.00	67	44-97	

Lab Batch #: 83553

Sample: 33502-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	18.7	25.00	75	43-124	
Tetrachloro-m-xylene	17.9	25.00	72	44-97	

Lab Batch #: 83553

Sample: 33502-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	20.5	25.00	82	43-124	
Tetrachloro-m-xylene	19.4	25.00	77	44-97	

Lab Batch #: 83553

Sample: 33502-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Polychlorinated Biphenyls Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Decachlorobiphenyl	20.8	25.00	83	43-124	
Tetrachloro-m-xylene	18.4	25.00	74	44-97	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83635

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	47.5	50.00	95	40-165	

Lab Batch #: 83635

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	49.6	50.00	99	40-165	

Lab Batch #: 83635

Sample: 10070802-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	193	50.00	386	40-165	**

Lab Batch #: 83635

Sample: 10070802-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	50.9	50.00	102	40-165	

Lab Batch #: 83635

Sample: 10070802-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	55.5	50.00	111	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Baltimore, MD 21228



Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83635

Sample: 10070802-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	53.3	50.00	107	40-165	

Lab Batch #: 83635

Sample: 33537-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	51.9	50.00	104	40-165	

Lab Batch #: 83635

Sample: 33537-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	43.5	50.00	87	40-165	

Lab Batch #: 83635

Sample: 33537-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Chlorinated Herbicides Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2,4-Dichlorophenylacetic Acid	56.2	50.00	112	40-165	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83535

Sample: 10070802-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.4	50.00	105	90-113	
Toluene-D8	49.8	50.00	100	90-108	
4-Bromofluorobenzene	55.9	50.00	112	79-125	

Lab Batch #: 83535

Sample: 10070802-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.6	50.00	103	90-113	
Toluene-D8	49.8	50.00	100	90-108	
4-Bromofluorobenzene	51.1	50.00	102	79-125	

Lab Batch #: 83535

Sample: 10070802-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.7	50.00	105	90-113	
Toluene-D8	50.3	50.00	101	90-108	
4-Bromofluorobenzene	50.8	50.00	102	79-125	

Lab Batch #: 83535

Sample: 10070802-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.8	50.00	106	90-113	
Toluene-D8	49.9	50.00	100	90-108	
4-Bromofluorobenzene	50.7	50.00	101	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83535

Sample: 33519-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.4	50.00	103	90-113	
Toluene-D8	50.2	50.00	100	90-108	
4-Bromofluorobenzene	53.1	50.00	106	79-125	

Lab Batch #: 83535

Sample: 33519-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.3	50.00	103	90-113	
Toluene-D8	50.1	50.00	100	90-108	
4-Bromofluorobenzene	52.1	50.00	104	79-125	

Lab Batch #: 83535

Sample: 33519-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY

Volatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.0	50.00	104	90-113	
Toluene-D8	50.4	50.00	101	90-108	
4-Bromofluorobenzene	53.0	50.00	106	79-125	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83607

Sample: 33507-1-BKS / BKS

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Semivolatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	2810	3330	85	48-112	
2-Fluorophenol	5240	6650	79	45-107	
Nitrobenzene-d5	2650	3330	80	44-98	
Phenol-d6	5380	6650	81	38-100	
Terphenyl-D14	3190	3330	96	34-165	
2,4,6-Tribromophenol	5390	6650	81	44-104	

Lab Batch #: 83607

Sample: 33507-1-BLK / BLK

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Semivolatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	2850	3330	85	48-112	
2-Fluorophenol	5380	6660	81	45-107	
Nitrobenzene-d5	2830	3330	85	44-98	
Phenol-d6	5490	6660	82	38-100	
Terphenyl-D14	3130	3330	94	34-165	
2,4,6-Tribromophenol	5420	6660	81	44-104	

Lab Batch #: 83607

Sample: 33507-1-BSD / BSD

Matrix: Solid

Units: ug/kg

SURROGATE RECOVERY STUDY					
Semivolatile Organic Compounds	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	2780	3320	84	48-112	
2-Fluorophenol	5040	6650	76	45-107	
Nitrobenzene-d5	2610	3320	79	44-98	
Phenol-d6	5230	6650	79	38-100	
Terphenyl-D14	3020	3320	91	34-165	
2,4,6-Tribromophenol	5350	6650	80	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83607

Sample: 10070220-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2800	3330	84	48-112	
2-Fluorophenol	4770	6660	72	45-107	
Nitrobenzene-d5	2680	3330	80	44-98	
Phenol-d6	5340	6660	80	38-100	
Terphenyl-D14	3200	3330	96	34-165	
2,4,6-Tribromophenol	5800	6660	87	44-104	

Lab Batch #: 83607

Sample: 10070220-001 S / MS

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2690	3320	81	48-112	
2-Fluorophenol	4540	6650	68	45-107	
Nitrobenzene-d5	2500	3320	75	44-98	
Phenol-d6	5030	6650	76	38-100	
Terphenyl-D14	3190	3320	96	34-165	
2,4,6-Tribromophenol	5740	6650	86	44-104	

Lab Batch #: 83607

Sample: 10070220-001 SD / MSD

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY					
Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2790	3330	84	48-112	
2-Fluorophenol	4740	6650	71	45-107	
Nitrobenzene-d5	2550	3330	77	44-98	
Phenol-d6	5190	6650	78	38-100	
Terphenyl-D14	3120	3330	94	34-165	
2,4,6-Tribromophenol	5410	6650	81	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83643

Sample: 10070802-001 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2500	3320	75	48-112	
2-Fluorophenol	4580	6650	69	45-107	
Nitrobenzene-d5	2390	3320	72	44-98	
Phenol-d6	4800	6650	72	38-100	
Terphenyl-D14	2480	3320	75	34-165	
2,4,6-Tribromophenol	5280	6650	79	44-104	

Lab Batch #: 83643

Sample: 10070802-002 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2560	3320	77	48-112	
2-Fluorophenol	5250	6650	79	45-107	
Nitrobenzene-d5	2590	3320	78	44-98	
Phenol-d6	5050	6650	76	38-100	
Terphenyl-D14	2380	3320	72	34-165	
2,4,6-Tribromophenol	5360	6650	81	44-104	

Lab Batch #: 83643

Sample: 10070802-003 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2520	3320	76	48-112	
2-Fluorophenol	5190	6630	78	45-107	
Nitrobenzene-d5	2530	3320	76	44-98	
Phenol-d6	5020	6630	76	38-100	
Terphenyl-D14	0 0	3320	67	34-165	
2,4,6-Tribromophenol	5400	6630	81	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Form 2 - Surrogate Recoveries

Project Name: Gude Landfill

08/24/2010

Work Order #: 10070802

Project ID: N/A

Lab Batch #: 83643

Sample: 10070802-004 / SMP

Matrix: Soil

Units: ug/kg

SURROGATE RECOVERY STUDY

Semivolatle Organic Compounds Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
2-Fluorobiphenyl	2270	3330	68	48-112	
2-Fluorophenol	4620	6660	69	45-107	
Nitrobenzene-d5	2230	3330	67	44-98	
Phenol-d6	4530	6660	68	38-100	
Terphenyl-D14	0 0	3330	64	34-165	
2,4,6-Tribromophenol	4910	6660	74	44-104	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

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Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10070802

Project ID: N/A

Prep Batch #: 33518

Date Prepared: 07/12/2010

Sample ID: 33518-1-BKS

Matrix: Solid

Lab Batch ID 83559

Date Analyzed: 07/12/2010

Analyst: 1034

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1.250	20.00	20.44	102	75-125	
Arsenic	<0.2500	20.00	20.57	103	75-125	
Barium	<1.250	20.00	21.05	105	75-125	
Beryllium	<1.250	20.00	18.77	94	75-125	
Cadmium	<1.250	20.00	20.37	102	75-125	
Chromium	<1.250	20.00	21.87	109	75-125	
Cobalt	<1.250	20.00	20.67	103	75-125	
Copper	<1.250	20.00	21.85	109	75-125	
Lead	<1.250	20.00	21.97	110	75-125	
Mercury	<0.0500	0.5000	0.5700	114	75-125	
Nickel	<1.250	20.00	20.63	103	75-125	
Selenium	<1.250	20.00	18.18	91	75-125	
Silver	<1.250	20.00	20.84	104	75-125	
Thallium	<1.000	20.00	22.00	110	75-125	
Tin	<2.500	20.00	20.05	100	75-125	
Vanadium	<1.250	20.00	21.39	107	75-125	
Zinc	<5.000	20.00	16.27	81	75-125	

Blank Spike Recovery [D] = 100*(([C]-[A])/[B])

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H = Recovery of BS, BSD or both exceeded the laboratory control limits

F = RPD exceeded the laboratory control limits

I = Recovery of BS, BSD or both below the laboratory control limits



Blank Spike Recovery

Project Name: Gude Landfill

Work Order #: 10070802

Project ID: N/A

Prep Batch #: 33518

Date Prepared: 07/12/2010

Sample ID: 33518-1-BKS

Matrix: Solid

Lab Batch ID 83620

Date Analyzed: 07/14/2010

Analyst: 1034

Reporting Units: mg/kg

BLANK /BLANK SPIKE RECOVERY STUDY

Total Metals Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	<1.250	20.00	22.75	114	75-125	
Arsenic	<0.2500	20.00	22.62	113	75-125	
Barium	<1.250	20.00	22.09	110	75-125	
Beryllium	<1.250	20.00	14.62	73	75-125	I
Cadmium	<1.250	20.00	21.90	110	75-125	
Chromium	<1.250	20.00	22.26	111	75-125	
Cobalt	<1.250	20.00	25.67	128	75-125	H
Copper	<1.250	20.00	22.70	114	75-125	
Lead	<1.250	20.00	22.18	111	75-125	
Mercury	<0.0500	0.5000	0.5600	112	75-125	
Nickel	<1.250	20.00	23.56	118	75-125	
Selenium	<1.250	20.00	20.90	105	75-125	
Silver	<1.250	20.00	22.27	111	75-125	
Thallium	<1.000	20.00	21.91	110	75-125	
Tin	<2.500	20.00	22.52	113	75-125	
Vanadium	<1.250	20.00	23.10	116	75-125	
Zinc	<5.000	20.00	22.38	112	75-125	

Blank Spike Recovery [D] = $100 * (([C] - [A]) / [B])$

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H= Recovery of BS,BSD or both exceeded the laboratory control limits

F = RPD exceeded the laboratory control limits

I = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Lab Batch ID: 83635

Units: ug/kg

Date Prepared: 07/13/2010

Date Analyzed: 07/14/2010

Sample: 33537-1-BKS

Method: SW8151A_PREP / SW8151

Project ID: N/A

Analyst: 1029

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4-D	<9.70	99.4	821.8	83	99.4	92.4	93	11	65-110	30	
2,4,5-TP (Silvex)	<9.970	99.40	82.50	83	99.40	93.08	94	12	58-130	30	
2,4,5-T	<9.970	99.40	97.71	98	99.40	112.7	114	15	81-130	30	
Dinoseb	<49.85	497	383.6	77	497	413.4	84	9	62-102	30	

Sample: 83556-1-BKS

Method: / SW9014

Analyst: 1022

Matrix: Solid

Date Prepared: 07/12/2010

Date Analyzed: 07/12/2010

Prep Batch #: 1

Lab Batch ID: 83556

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Cyanide, Total	<1.250	5.000	4.740	95	5.000	4.580	92	3	80-120	20	

Relative Percent Difference RPD = $200 * (D-F) / (D+F)$

Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / (B)$

Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / (E)$

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H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Lab Batch ID: 83560

Date Prepared: 07/09/2010

Date Analyzed: 07/12/2010

Project ID: N/A

Analyst: 1029

Matrix: Solid

Sample: 33515-1-BKS

Method: SW3550 / SW8081B

Units: ug/kg

Organochlorine Pesticides	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag		
alpha-BHC	<9.881	19.78	21.60	109	19.78	22.49	114	4	80-126	25			
gamma-BHC (Lindane)	<9.881	19.78	21.34	108	19.78	22.35	113	5	81-124	25			
beta-BHC	<9.881	19.78	20.06	101	19.78	21.03	107	6	77-121	25			
delta-BHC	<9.881	19.78	23.35	118	19.78	24.77	126	7	75-126	25			
Heptachlor	<9.881	19.78	20.77	105	19.78	21.69	110	5	76-120	25			
Aldrin	<9.881	19.78	21.97	111	19.78	22.83	116	4	81-122	25			
Heptachlor epoxide	<9.881	19.78	21.25	107	19.78	22.10	112	5	81-123	25			
gamma-Chlordane	<9.881	19.78	22.68	115	19.78	23.66	120	4	89-135	25			
alpha-Chlordane	<9.881	19.78	23.08	117	19.78	24.11	122	4	82-121	25	H		
4,4-DDE	<9.881	19.78	20.65	104	19.78	21.94	111	7	78-138	25			
Endosulfan I	<9.881	19.78	22.93	116	19.78	23.87	121	4	82-123	25			
Dieldrin	<9.881	19.78	23.63	119	19.78	24.77	126	6	81-126	25			
Endrin	<9.881	19.78	22.75	115	19.78	23.92	121	5	70-131	25			
4,4-DDD	<9.881	19.78	22.27	113	19.78	23.82	121	7	68-143	25			
Endosulfan II	<9.881	19.78	22.30	113	19.78	23.53	119	5	80-133	25			
4,4-DDT	<9.881	19.78	22.05	111	19.78	23.80	121	9	68-129	25			
Endrin aldehyde	<9.881	19.78	23.12	117	19.78	24.76	126	7	77-127	25			
Methoxychlor	<9.881	19.78	19.54	99	19.78	20.99	107	8	67-121	25			
Endosulfan sulfate	<9.881	19.78	22.72	115	19.78	24.11	122	6	79-126	25			
Endrin ketone	<9.881	19.78	22.67	115	19.78	24.14	123	7	82-137	25			

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicates (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Date Prepared: 07/08/2010

Lab Batch ID: 83553

Date Analyzed: 07/09/2010

Project ID: N/A

Analyst: 1029

Matrix: Solid

Sample: 33502-1-BKS

Method: SW3550 / SW8082

Units: mg/kg

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Polychlorinated Biphenyls	<0.0495	0.4931	0.4310	87	0.4931	0.4167	84	4	59-123	25	
PCB-1016	<0.0495	0.4931	0.4727	96	0.4931	0.4716	95	1	54-152	25	
PCB-1260											

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Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: i

Lab Batch ID: 83607

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Sample: 33507-1-BKS

Method: SW3550 / SW8270C

Project ID: N/A

Analyst: 1014

Matrix: Solid

Units: ug/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Semivolatile Organic Compounds	Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Acenaphthene	<83.31	1331	1293	97	1331	1248	94	3	63-120	30	
	Acenaphthylene	<83.31	1331	1312	99	1331	1260	95	4	59-125	30	
	Acetophenone	<83.31	1331	1325	100	1331	1278	96	4	57-122	30	
	Anthracene	<83.31	1331	1268	95	1331	1209	91	4	63-121	30	
	Benzo(a)anthracene	<83.31	1331	1335	100	1331	1257	95	5	61-130	30	
	Benzo(a)pyrene	<83.31	1331	1415	106	1331	1357	102	4	58-141	30	
	Benzo(b)fluoranthene	<83.31	1331	1492	112	1331	1406	106	6	59-140	30	
	Benzo(g,h,i)perylene	<83.31	1331	1476	111	1331	1421	107	4	32-158	30	
	Benzo(k)fluoranthene	<83.31	1331	1406	106	1331	1319	99	7	55-137	30	
	Benzyl butyl phthalate	<83.31	1331	1522	114	1331	1374	103	10	57-132	30	
	bis(2-chloroethoxy) methane	<83.31	1331	1250	94	1331	1197	90	4	61-123	30	
	bis(2-chloroethyl) ether	<83.31	1331	1319	99	1331	1267	95	4	55-127	30	
	bis(2-chloroisopropyl) ether	<83.31	1331	1260	95	1331	1210	91	4	42-128	30	
	bis(2-ethylhexyl) phthalate	<83.31	1331	1465	110	1331	1328	100	10	52-142	30	
	4-Bromophenylphenyl ether	<83.31	1331	1297	97	1331	1241	93	4	66-138	30	
	Di-n-butyl phthalate	<166.6	1331	1390	104	1331	1328	100	4	54-126	30	
	4-Chloro-3-methylphenol	<83.31	1331	1291	97	1331	1240	93	4	63-125	30	
	4-Chloroaniline	<166.6	1331	1268	95	1331	1196	90	5	64-118	30	
	2-Chloronaphthalene	<83.31	1331	1476	111	1331	1423	107	4	62-117	30	
	2-Chlorophenol	<83.31	1331	1301	98	1331	1249	94	4	57-128	30	

Relative Percent Difference RPD = $200 * (D-F) / (D+F)$

Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$

Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits

F = RPD exceeded the laboratory control limits

L = Recovery of BS, BSD or both below the laboratory control limits

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LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Date Prepared: 07/09/2010

Lab Batch ID: 83607

Date Analyzed: 07/09/2010

Units: ug/kg

Sample: 33507-1-BKS

Project ID: N/A
Analyst: 1014
Matrix: Solid

Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
4-Chlorophenyl phenyl ether	<83.31	1331	1462	110	1331	1395	105	5	65-129	30	
Chrysene	<83.31	1331	1323	99	1331	1263	95	4	62-127	30	
Dibenz(a,h)anthracene	<83.31	1331	1463	110	1331	1410	106	4	43-148	30	
Dibenzofuran	<83.31	1331	1268	95	1331	1233	93	2	63-120	30	
3,3-Dichlorobenzidine	<83.31	1331	1087	82	1331	1014	76	8	32-138	30	
2,4-Dichlorophenol	<83.31	1331	1312	99	1331	1261	95	4	65-127	30	
Diethyl phthalate	<83.31	1331	1390	104	1331	1320	99	5	58-124	30	
Dimethyl phthalate	<83.31	1331	1318	99	1331	1268	95	4	55-125	30	
2,4-Dimethylphenol	<83.31	1331	1249	94	1331	1191	90	4	65-124	30	
4,6-Dinitro-2-methyl phenol	<83.31	1331	1449	109	1331	1371	103	6	26-167	30	
2,4-Dinitrophenol	<166.6	1331	1279	96	1331	1217	92	4	18-177	30	
2,4-Dinitrotoluene	<83.31	1331	1329	100	1331	1255	94	6	60-134	30	
2,6-Dinitrotoluene	<83.31	1331	1377	103	1331	1317	99	4	63-136	30	
Fluoranthene	<83.31	1331	1346	101	1331	1266	95	6	54-127	30	
Fluorene	<83.31	1331	1455	109	1331	1381	104	5	64-119	30	
Hexachlorobenzene	<83.31	1331	1373	103	1331	1296	98	5	58-124	30	
Hexachlorobutadiene	<83.31	1331	1276	96	1331	1246	94	2	64-128	30	
Hexachlorocyclopentadiene	<83.31	1331	1323	99	1331	1271	96	3	26-152	30	
Hexachloroethane	<83.31	1331	1270	95	1331	1235	93	2	55-125	30	
Indeno(1,2,3-c,d)pyrene	<83.31	1331	1490	112	1331	1432	108	4	38-150	30	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Lab Batch ID: 83607

Units: ug/kg

Project ID: N/A
Analyst: 1014
Matrix: Solid

Sample: 33507-1-BKS

Date Prepared: 07/09/2010
Date Analyzed: 07/09/2010

Semivolatile Organic Compounds	Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Isophorone	<83.31	1331	1207	91	1331	1155	87	4	56-120	30	
	2-Methylnaphthalene	<83.31	1331	1279	96	1331	1245	94	2	63-120	30	
	2-Methylphenol	<83.31	1331	1274	96	1331	1212	91	5	57-121	30	
	3&4-Methylphenol	<83.31	1331	1288	97	1331	1242	93	4	49-123	30	
	4-Nitroaniline	<83.31	1331	1215	91	1331	1103	83	9	53-128	30	
	3-Nitroaniline	<83.31	1331	1320	99	1331	1241	93	6	53-132	30	
	2-Nitroaniline	<166.6	1331	1266	95	1331	1200	90	5	54-131	30	
	Nitrobenzene	<83.31	1331	1213	91	1331	1156	87	4	53-119	30	
	2-Nitrophenol	<83.31	1331	1297	97	1331	1233	93	4	65-137	30	
	4-Nitrophenol	<83.31	1331	1279	96	1331	1202	90	6	50-123	30	
	N-Nitrosodimethylamine	<83.31	1331	862.9	65	1331	747.5	56	15	62-123	30	L
	N-Nitrosodi-n-propylamine	<83.31	1331	1310	98	1331	1257	95	3	46-121	30	
	N-Nitrosodiphenylamine	<83.31	1331	1506	113	1331	1445	109	4	56-129	30	
	Di-n-octyl pthalate	<83.31	1331	1579	119	1331	1397	105	13	38-144	30	
	1,2,4,5-Tetrachlorobenzene	<83.31	1331	1298	98	1331	1257	95	3	64-127	30	
	Pentachlorophenol	<166.6	1331	1350	101	1331	1300	98	3	46-134	30	
	Phenanthrene	<83.31	1331	1267	95	1331	1217	92	3	61-119	30	
	Phenol	<83.31	1331	1168	88	1331	1108	83	6	47-108	30	
	Pyrene	<83.31	1331	1505	113	1331	1382	104	8	54-141	30	
	2,3,4,6-Tetrachlorophenol	<83.31	1331	1457	109	1331	1392	105	4	56-130	30	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Date Prepared: 07/09/2010

Lab Batch ID: 83607

Date Analyzed: 07/09/2010

Units: ug/kg

Project ID: N/A

Analyst: 1014

Matrix: Solid

Sample: 33507-1-BKS

Semivolatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2,4,6-Trichlorophenol	<83.31	1331	1384	104	1331	1320	99	5	67-127	30	
2,4,5-Trichlorophenol	<83.31	1331	1345	101	1331	1253	94	7	69-132	30	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Lab Batch ID: 83535

Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Sample: 33519-1-BKS

Method: SW5035 / SW8260B

Project ID: N/A

Analyst: 1011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Analytes												
Dichlorodifluoromethane	<2.572	61.86	46.42	75	61.86	50.76	82	9	55-125	25		
Chloromethane	<2.572	61.86	50.45	82	61.86	57.46	93	13	62-125	25		
Vinyl Chloride	<2.572	61.86	52.93	86	61.86	59.55	96	11	65-130	25		
Bromomethane	<2.572	61.86	49.06	79	61.86	55.16	89	12	59-131	25		
Chloroethane	<2.572	61.86	55.62	90	61.86	62.01	100	11	57-135	25		
Acetone	<10.29	61.86	62.72	101	61.86	66.64	108	7	7-180	25		
Trichlorofluoromethane	<2.572	61.86	56.13	91	61.86	61.42	99	8	55-133	25		
1,1-Dichloroethene	<2.572	61.86	47.35	77	61.86	52.72	85	10	60-122	25		
Methylene chloride	<2.572	61.86	48.75	79	61.86	56.06	91	14	63-125	25		
trans-1,2-Dichloroethene	<2.572	61.86	50.07	81	61.86	56.68	92	13	62-129	25		
1,1-Dichloroethane	<2.572	61.86	48.00	78	61.86	55.83	90	14	55-135	25		
Vinyl acetate	<2.572	61.86	63.67	103	61.86	72.90	118	14	57-136	25		
2-Butanone (MEK)	<10.29	61.86	58.85	95	61.86	62.46	101	6	36-201	25		
cis-1,2-Dichloroethene	<2.572	61.86	46.79	76	61.86	53.28	86	12	60-127	25		
Bromochloromethane	<2.572	61.86	49.13	79	61.86	56.57	92	15	66-127	25		
Chloroform	<2.572	61.86	47.67	77	61.86	54.21	88	13	64-113	25		
2,2-Dichloropropane	<2.572	61.86	46.92	76	61.86	52.84	86	12	53-129	25		
1,1,1-Trichloroethane	<2.572	61.86	46.91	76	61.86	52.22	85	11	57-127	25		
1,2-Dichloroethane	<2.572	61.86	53.87	87	61.86	60.97	99	13	62-124	25		
1,1-Dichloropropene	<2.572	61.86	47.87	77	61.86	53.65	87	12	61-122	25		

Relative Percent Difference $RPD = 200 * |(D-F)/(D+F)|$
 Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C)/[B]$
 Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F)/[E]$

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H= Recovery of BS, BSD or both exceeded the laboratory control limits
 F = RPD exceeded the laboratory control limits
 L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Lab Batch ID: 83535

Units: ug/kg

Date Prepared: 07/09/2010
Date Analyzed: 07/09/2010

Sample: 33519-1-BKS

Project ID: N/A
Analyst: 1011
Matrix: Solid

Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Carbon tetrachloride	<2.572	61.86	47.22	76	61.86	51.52	83	9	55-131	25	
Benzene	<2.572	61.86	47.55	77	61.86	53.89	87	12	64-114	25	
Dibromomethane	<2.572	61.86	53.65	87	61.86	61.08	99	13	64-132	25	
1,2-Dichloropropane	<2.572	61.86	50.23	81	61.86	57.23	93	14	61-117	25	
Carbon Disulfide	<3.144	61.86	52.42	85	61.86	58.95	95	11	37-161	25	
Trichloroethene	<2.572	61.86	46.67	75	61.86	52.58	85	13	62-121	25	
Acrylonitrile	<10.29	61.86	71.06	115	61.86	77.35	125	8	59-168	25	
Bromodichloromethane	<2.572	61.86	49.48	80	61.86	56.30	91	13	62-126	25	
cis-1,3-Dichloropropene	<2.572	61.86	50.92	82	61.86	57.66	93	13	59-119	25	
4-Methyl-2-Pentanone (MIBK)	<10.29	61.86	64.68	105	61.86	69.71	113	7	59-148	25	
trans-1,3-Dichloropropene	<2.572	61.86	52.22	84	61.86	59.95	97	14	51-126	25	
1,1,2-Trichloroethane	<2.572	61.86	52.45	85	61.86	60.61	98	14	60-134	25	
Toluene	<2.572	61.86	47.51	77	61.86	53.35	86	11	64-117	25	
1,3-Dichloropropane	<2.572	61.86	52.39	85	61.86	59.80	97	13	61-129	25	
2-Hexanone (MBK)	<10.29	61.86	60.94	99	61.86	67.07	109	10	9-176	25	
1,2-Dibromoethane	<2.572	61.86	54.53	88	61.86	61.71	100	13	65-135	25	
Dibromochloromethane	<2.572	61.86	50.45	82	61.86	58.33	94	14	67-126	25	
Acrolein	<10.29	61.86	74.14	120	61.86	82.20	133	10	52-168	25	
1,1,1,2-Tetrachloroethane	<2.572	61.86	46.42	75	61.86	53.36	86	14	64-121	25	
Bromoform	<2.572	61.86	44.92	73	61.86	51.49	83	13	62-120	25	

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Relative Percent Difference $RPD = 200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery $[D] = 100 * (C) / [B]$
Laboratory Control Sample Duplicate (LCSD) Percent Recovery $[G] = 100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



LCS/LCSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 1

Date Prepared: 07/09/2010

Lab Batch ID: 83535

Date Analyzed: 07/09/2010

Units: ug/kg

Sample: 33519-i-BKS

Project ID: N/A
Analyst: 1011
Matrix: Solid

Volatile Organic Compounds	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
trans-1,4-dichloro-2-butene	<2.572	61.86	64.61	104	61.86	72.40	72.40	117	12	43-133	25	
Tetrachloroethene	<2.572	61.86	45.96	74	61.86	51.45	51.45	83	11	58-129	25	
Chlorobenzene	<2.572	61.86	46.28	75	61.86	52.26	52.26	85	13	64-116	25	
Ethylbenzene	<2.572	61.86	47.32	76	61.86	52.84	52.84	86	12	61-118	25	
m&p-Xylene	<5.144	123.7	94.51	76	123.7	105.1	105.1	85	11	63-116	25	
Styrene	<2.572	61.86	47.46	77	61.86	53.55	53.55	87	12	60-112	25	
1,1,2,2-Tetrachloroethane	<2.572	61.86	59.12	96	61.86	65.74	65.74	106	10	58-144	25	
o-Xylene	<2.572	61.86	47.29	76	61.86	53.31	53.31	86	12	65-117	25	
1,2,3-Trichloropropane	<2.572	61.86	58.34	94	61.86	65.44	65.44	106	12	59-139	25	
1,3-Dichlorobenzene	<2.572	61.86	47.34	77	61.86	53.40	53.40	87	12	58-123	25	
1,4-Dichlorobenzene	<2.572	61.86	46.51	75	61.86	53.14	53.14	86	14	58-121	25	
1,2-Dichlorobenzene	<2.572	61.86	48.55	78	61.86	55.45	55.45	90	14	59-124	25	
1,2-Dibromo-3-chloropropane	<20.58	61.86	67.61	109	61.86	73.78	73.78	120	10	57-144	25	
1,2,4-Trichlorobenzene	<2.572	61.86	50.44	82	61.86	57.63	57.63	93	13	46-122	25	
Iodomethane	<10.29	61.86	52.66	85	61.86	60.13	60.13	97	13	46-137	25	
Naphthalene	<2.572	61.86	60.38	98	61.86	68.62	68.62	111	12	54-164	25	
1,2,3-Trichlorobenzene	<2.572	61.86	50.91	82	61.86	59.32	59.32	96	16	48-126	25	

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Relative Percent Difference RPD = $200 * (D-F) / (D+F)$
Laboratory Control Sample (LCS) Percent Recovery [D] = $100 * (C) / [B]$
Laboratory Control Sample Duplicates (LCSD) Percent Recovery [G] = $100 * (F) / [E]$

H = Recovery of BS, BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS, BSD or both below the laboratory control limits



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 33518

Lab Batch ID: 83559

Reporting Units: mg/kg

Date Prepared: 07/12/2010

Date Analyzed: 07/12/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S

Sample ID: 10070220-001 S

Method: SW3050B /SW6020

Project ID: N/A

Analyst: 1034

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Total Metals Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Antimony	<1.212	19.61	9.867	50	22.88	11.77	51	2	75-125	30	X
Arsenic	1.827	19.61	18.87	87	22.88	22.17	89	2	75-125	30	
Barium	111.8	19.61	127.9	82	22.88	144.3	142	54	75-125	30	XF
Beryllium	<1.212	19.61	17.05	87	22.88	19.95	87	0	75-125	30	
Cadmium	<1.212	19.61	19.36	99	22.88	22.67	99	0	75-125	30	
Chromium	28.60	19.61	51.32	116	22.88	55.32	117	1	75-125	30	
Cobalt	19.33	19.61	35.33	82	22.88	41.03	95	15	75-125	30	
Copper	32.75	19.61	38.57	30	22.88	45.98	58	64	75-125	30	XF
Lead	15.45	19.61	31.94	84	22.88	36.97	94	11	75-125	30	
Mercury	<0.0485	0.4902	0.5392	110	0.5720	0.6464	113	3	75-125	30	
Nickel	41.93	19.61	53.48	59	22.88	59.72	78	28	75-125	30	X
Selenium	<1.212	19.61	16.85	86	22.88	19.39	85	1	75-125	30	
Silver	<1.212	19.61	19.80	101	22.88	23.57	103	2	75-125	30	
Thallium	<0.9694	19.61	21.68	111	22.88	25.51	111	0	75-125	30	
Tin	<2.424	19.61	20.19	103	22.88	23.58	103	0	75-125	30	
Vanadium	42.50	19.61	64.11	110	22.88	69.67	119	8	75-125	30	
Zinc	68.49	19.61	97.54	148	22.88	110.4	183	21	75-125	30	X

Matrix Spike Percent Recovery [DI] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [GI] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 33518

Lab Batch ID: 83620

Reporting Units: mg/kg

Date Prepared: 07/12/2010

Date Analyzed: 07/14/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S

Sample ID: 10070220-001 S

Method: SW3050B /SW6020

Project ID: N/A

Analyst: 1034

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Total Metals Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Antimony	<1.212	19.61	10.82	55	22.88	12.76	56	2	75-125	30	X
Arsenic	1.827	19.61	21.66	101	22.88	24.77	100	1	75-125	30	
Barium	111.8	19.61	134.2	114	22.88	149.5	165	37	75-125	30	XF
Beryllium	<1.212	19.61	12.61	64	22.88	14.68	64	0	75-125	30	X
Cadmium	<1.212	19.61	20.58	105	22.88	23.85	104	1	75-125	30	
Chromium	28.60	19.61	54.06	130	22.88	57.72	127	2	75-125	30	X
Cobalt	19.33	19.61	43.70	124	22.88	50.84	138	11	75-125	30	X
Copper	32.75	19.61	41.65	45	22.88	48.68	70	43	75-125	30	XF
Lead	15.45	19.61	32.00	84	22.88	36.92	94	11	75-125	30	
Mercury	<0.0485	0.4902	0.5588	114	0.5720	0.6292	110	4	75-125	30	
Nickel	41.93	19.61	61.51	100	22.88	67.67	113	12	75-125	30	
Selenium	<1.212	19.61	18.83	96	22.88	21.90	96	0	75-125	30	
Silver	<1.212	19.61	20.79	106	22.88	24.29	106	0	75-125	30	
Thallium	<0.9694	19.61	21.41	109	22.88	24.97	109	0	75-125	30	
Tin	<2.424	19.61	22.07	113	22.88	25.67	112	1	75-125	30	
Vanadium	42.50	19.61	71.17	146	22.88	76.36	148	1	75-125	30	X
Zinc	68.49	19.61	103.2	177	22.88	114.8	202	13	75-125	30	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Client Sample Id: Gude-MW11A-SO-14 to 16 S
 Sample ID: 10070220-001 S
 Method: SW8151A_PREP /SW8151A
 Project ID: N/A
 Analyst: 1029
 Matrix: Soil

Date Prepared: 07/13/2010
 Date Analyzed: 07/14/2010

Prep Batch #: 33537
 Lab Batch ID: 83635
 Reporting Units: ug/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Chlorinated Herbicides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	2,4-D	<120.3	1196	875.4	73	1187	911.6	77	5	57-117	30
2,4,5-TP (Silvex)	<12.03	119.6	93.38	78	118.7	100.1	84	7	59-126	30	
2,4,5-T	<12.03	119.6	110.5	92	118.7	115.4	97	5	66-144	30	
Dinoseb	<60.13	597.8	460.3	77	593.7	489.7	82	6	63-106	30	

Client Sample Id: Gude-MW9-SO-20 to 22 S
 Sample ID: 10070802-002 S
 Method: /SW9014
 Analyst: 1022
 Matrix: Soil

Date Prepared: 07/12/2010
 Date Analyzed: 07/12/2010

Prep Batch #: 83556
 Lab Batch ID: 83556
 Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Cyanide Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Cyanide, Total	<1.506	6.024	5.325	88	6.024	5.325	88	0	80-120	20

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 33515

Lab Batch ID: 83560

Reporting Units: ug/kg

Date Prepared: 07/09/2010
Date Analyzed: 07/12/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S
Sample ID: 10070220-001 S
Method: SW3550/SW8081B

Project ID: N/A
Analyst: 1029
Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Organochlorine Pesticides Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
alpha-BHC	<11.91	23.89	23.89	100	23.96	24.51	102	2	70-130	30	
gamma-BHC (Lindane)	<11.91	23.89	24.13	101	23.96	24.64	103	2	72-128	30	
beta-BHC	<11.91	23.89	23.27	97	23.96	23.19	97	0	74-121	30	
delta-BHC	<11.91	23.89	26.68	112	23.96	26.37	110	2	72-127	30	
Heptachlor	<11.91	23.89	23.43	98	23.96	24.38	102	4	66-127	30	
Aldrin	<11.91	23.89	24.75	104	23.96	25.24	105	1	71-130	30	
Heptachlor epoxide	<11.91	23.89	24.38	102	23.96	24.39	102	0	73-128	30	
gamma-Chlordane	<11.91	23.89	26.65	112	23.96	25.92	108	4	73-153	30	
alpha-Chlordane	<11.91	23.89	26.55	111	23.96	26.12	109	2	62-144	30	
4,4-DDE	<11.91	23.89	24.13	101	23.96	23.77	99	2	78-143	30	
Endosulfan I	<11.91	23.89	26.00	109	23.96	25.77	108	1	73-129	30	
Dieldrin	<11.91	23.89	27.35	114	23.96	26.97	113	1	72-136	30	
Endrin	<11.91	23.89	28.87	121	23.96	31.04	130	7	82-131	30	
4,4-DDD	<11.91	23.89	25.78	108	23.96	24.86	104	4	70-143	30	
Endosulfan II	<11.91	23.89	25.86	108	23.96	25.31	106	2	75-136	30	
4,4-DDT	<11.91	23.89	26.65	112	23.96	25.70	107	5	78-125	30	
Endrin aldehyde	<11.91	23.89	28.64	120	23.96	26.73	112	7	78-130	30	
Methoxychlor	<11.91	23.89	23.90	100	23.96	24.08	101	1	71-122	30	
Endosulfan sulfate	<11.91	23.89	26.22	110	23.96	25.71	107	3	77-129	30	
Endrin ketone	<11.91	23.89	25.55	107	23.96	24.93	104	3	75-145	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 33502

Lab Batch ID: 83553

Reporting Units: mg/kg

Date Prepared: 07/08/2010

Date Analyzed: 07/09/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S

Sample ID: 10070220-001 S

Method: SW3550 /SW8082

Project ID: N/A

Analyst: 1029

Matrix: Soil

Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											Flag
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD		
PCB-1016	<0.0596	0.5966	0.4841	81	0.5984	0.4449	74	9	52-122	30		
PCB-1260	<0.0596	0.5966	0.6187	104	0.5984	0.5438	91	13	52-184	30		

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: 33507

Lab Batch ID: 83607

Reporting Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Client Sample Id: Gude-MW11A-SO-14 to 16 S

Sample ID: 10070220-001 S

Method: SW3550 /SW8270C

Project ID: N/A

Analyst: 1014

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<101.5	1621	1512	93	1622	1509	93	0	52-128	30	
Acenaphthylene	<101.5	1621	1511	93	1622	1506	93	0	59-119	30	
Acetophenone	<101.5	1621	1468	91	1622	1486	92	1	53-115	30	
Anthracene	<101.5	1621	1579	97	1622	1487	92	5	51-137	30	
Benzo(a)anthracene	<101.5	1621	1698	105	1622	1558	96	9	45-163	30	
Benzo(a)pyrene	<101.5	1621	1808	112	1622	1686	104	7	52-164	30	
Benzo(b)fluoranthene	<101.5	1621	1901	117	1622	1776	109	7	58-154	30	
Benzo(g,h,i)perylene	<101.5	1621	1728	107	1622	1536	95	12	37-144	30	
Benzo(k)fluoranthene	<101.5	1621	1764	109	1622	1703	105	4	49-160	30	
Benzyl butyl phthalate	<101.5	1621	1915	118	1622	1669	103	14	40-179	30	
bis(2-chloroethoxy) methane	<101.5	1621	1390	86	1622	1400	86	0	53-120	30	
bis(2-chloroethyl) ether	<101.5	1621	1377	85	1622	1403	86	1	47-116	30	
bis(2-chloroisopropyl) ether	<101.5	1621	1380	85	1622	1389	86	1	45-112	30	
bis(2-ethylhexyl) phthalate	<101.5	1621	1865	115	1622	1608	99	15	43-172	30	
4-Bromophenyl phenyl ether	<101.5	1621	1581	98	1622	1510	93	5	44-159	30	
Di-n-butyl phthalate	<203	1621	1805	111	1622	1561	96	14	54-131	30	
4-Chloro-3-methylphenol	<101.5	1621	1535	95	1622	1505	93	2	57-130	30	
4-Chloroaniline	<203	1621	1460	90	1622	1481	91	1	50-122	30	
2-Chloronaphthalene	<101.5	1621	1668	103	1622	1722	106	3	50-124	30	
2-Chlorophenol	<101.5	1621	1386	86	1622	1441	89	3	54-119	30	
4-Chlorophenyl phenyl ether	<101.5	1621	1750	108	1622	1650	102	6	57-133	30	
Chrysene	<101.5	1621	1696	105	1622	1553	96	9	42-165	30	
Dibenz(a,h)anthracene	<101.5	1621	1745	108	1622	1545	95	13	37-140	30	
Dibenzofuran	<101.5	1621	1497	92	1622	1462	90	2	44-138	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of OC Criteria and RPD exceeded the laboratory control limits.

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Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #: **Date Prepared: 07/09/2010**
 Lab Batch ID: 83607 **Date Analyzed: 07/09/2010**
 Reporting Units: ug/kg

Client Sample Id: **Sample ID: 10070220-001 S**
 Method: SW3550 /SW8270C

Project ID: N/A
 Analyst: 1014
 Matrix: Soil

Semivolatile Organic Compounds Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
3,3-Dichlorobenzidine	<101.5	1621	1389	86	1622	1268	78	10	11-140	30	
2,4-Dichlorophenol	<101.5	1621	1512	93	1622	1539	95	2	56-131	30	
Diethyl phthalate	<101.5	1621	1768	109	1622	1531	94	15	51-126	30	
Dimethyl phthalate	<101.5	1621	1655	102	1622	1524	94	8	56-120	30	
2,4-Dimethylphenol	<101.5	1621	1224	76	1622	1234	76	0	49-124	30	
4,6-Dinitro-2-methyl phenol	<101.5	1621	1867	115	1622	1771	109	5	1-187	30	
2,4-Dinitrophenol	<203	1621	1792	111	1622	1582	98	12	4-200	30	
2,4-Dinitrotoluene	<101.5	1621	1778	110	1622	1523	94	16	57-138	30	
2,6-Dinitrotoluene	<101.5	1621	1730	107	1622	1585	98	9	61-136	30	
Fluoranthene	<101.5	1621	1798	111	1622	1534	95	16	40-155	30	
Fluorene	<101.5	1621	1707	105	1622	1614	100	5	55-128	30	
Hexachlorobenzene	<101.5	1621	1689	104	1622	1599	99	5	52-129	30	
Hexachlorobutadiene	<101.5	1621	1414	87	1622	1455	90	3	50-128	30	
Hexachlorocyclopentadiene	<101.5	1621	1511	93	1622	1557	96	3	13-144	30	
Hexachloroethane	<101.5	1621	1364	84	1622	1394	86	2	42-117	30	
Indeno(1,2,3-c,d)pyrene	<101.5	1621	1777	110	1622	1557	96	14	48-135	30	
Isophorone	<101.5	1621	1371	85	1622	1370	84	1	51-114	30	
2-Methylnaphthalene	<101.5	1621	1442	89	1622	1455	90	1	49-130	30	
2-Methylphenol	<101.5	1621	1429	88	1622	1443	89	1	54-119	30	
3&4-Methylphenol	<101.5	1621	1453	90	1622	1470	91	1	50-115	30	
4-Nitroaniline	<101.5	1621	1676	103	1622	1397	86	18	50-133	30	
3-Nitroaniline	<101.5	1621	1707	105	1622	1527	94	11	49-133	30	
2-Nitroaniline	<203	1621	1541	95	1622	1484	91	4	53-133	30	
Nitrobenzene	<101.5	1621	1335	82	1622	1344	83	1	48-113	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of OC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
 6630 Baltimore National Pike
 Baltimore, MD 21228



Form 3 - MS / MSD Recoveries

Project Name: Gude Landfill

Work Order #: 10070802

Prep Batch #:

Lab Batch ID: 83607

Reporting Units: ug/kg

Date Prepared: 07/09/2010

Date Analyzed: 07/09/2010

Client Sample Id:

Sample ID: 10070220-001 S

Method: SW3550 /SW8270C

Project ID: N/A

Analyst: 1014

Matrix: Soil

Semivolatile Organic Compounds	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
2-Nitrophenol	<101.5	1621	1429	88	1622	1449	89	1	56-136	30	
4-Nitrophenol	<101.5	1621	1705	105	1622	1487	92	13	47-135	30	
N-Nitrosodimethylamine	<101.5	1621	838.7	52	1622	852.1	53	2	45-122	30	
N-Nitrosodi-n-propylamine	<101.5	1621	1463	90	1622	1479	91	1	44-113	30	
N-Nitrosodiphenylamine	<101.5	1621	1815	112	1622	1772	109	3	57-124	30	
Di-n-octyl phthalate	<101.5	1621	1973	122	1622	1817	112	9	25-185	30	
1,2,4,5-Tetrachlorobenzene	<101.5	1621	1461	90	1622	1476	91	1	51-131	30	
Pentachlorophenol	<203	1621	1791	110	1622	1624	100	10	34-154	30	
Phenanthrene	<101.5	1621	1585	98	1622	1488	92	6	46-141	30	
Phenol	<101.5	1621	1294	80	1622	1306	81	1	47-103	30	
Pyrene	<101.5	1621	1772	109	1622	1723	106	3	24-181	30	
2,3,4,6-Tetrachlorophenol	<101.5	1621	1888	116	1622	1710	105	10	49-141	30	
2,4,6-Trichlorophenol	<101.5	1621	1612	99	1622	1619	100	1	59-133	30	
2,4,5-Trichlorophenol	<101.5	1621	1589	98	1622	1561	96	2	61-138	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

XF = Recovery of MS, MSD or both outside of QC Criteria and RPD exceeded the laboratory control limits.

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

ANALYTICAL REPORT

PROJECT NO. 10070802

Phase Sep Science East Station

Lot #: COG100441

Betsy Orr

Phase Separation Sciences
6630 Baltimore National Pike
Route 40 West
Baltimore, MD 21228

TESTAMERICA LABORATORIES, INC.


Christina M. Kovitch
Project Manager

July 19, 2010



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture Arkansas	(#P330-10-00139) (#88-0690)	Foreign Soil Import Permit WW HW	X X X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002319)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203010)	WW --	X --
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

- HW Hazardous Waste certification
- WW Non-potable Water and/or Wastewater certification
- X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pittsburgh_Updated 051910.doc

CASE NARRATIVE

Phase Separation Sciences

Lot # C0G100441

Sample Receiving:

TestAmerica Pittsburgh received samples on July 10, 2010. The cooler was received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

OPP's:

There were no problems associated with the analysis.

General Chemistry:

There were no problems associated with the analysis.



Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

Samples Transferred To:
Test America
5710 Executive Drive, Suite 106
Catonsville, MD 21228

Contact: Ken Ives
Phone : 410-869-0085

W.O. No.: 10070802

P.O. No.:

Project Name: Gude Landfill

Project Number: N/A

For Questions or issues please contact: John Slowikowski

Report Due On : 07/28/10 05:00

Table with 8 columns: Lab Sample ID, Field Sample ID, Date Sampled, Time Sampled, Matrix, Analyses Required, Method, Type of Container, Preservative. Contains 12 rows of sample data.

Data Deliverables Required: Results, copy of COC and QC

Perform Q.C. on Sample :

Send Report Attn : BETSY ORR

Airbill No.: Carrier: TEST AMERICA COURIER

Condition Upon Receipt:

Comments:

Samples Relinquished By: [Signature] Date: 7/19/10 Time: 1012 Samples Received By: [Signature]
Samples Relinquished By: [Signature] Date: 7/19/10 Time: 1136 Samples Received By: [Signature]
Samples Relinquished By: [Signature] Date: 7/18/10 Time: 1045 Samples Received By: [Signature]

Sub-Contractor Method Matrix Analyte Name

METHODS SUMMARY

COG100441

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Organophosphorous Compounds by GC	SW846 8141A	SW846 3541
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Residue as Percent Solids	SM20 2540G	

References:

- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

COG100441

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
L32JN	001	10070802-001	07/06/10	09:40
L32JP	002	10070802-002	07/06/10	14:00
L32JQ	003	10070802-003	07/06/10	12:15
L32JT	004	10070802-004	07/06/10	12:00

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Phase Separation Sciences

Client Sample ID: 10070802-001

GC Semivolatiles

Lot-Sample #...: C0G100441-001 Work Order #...: L32JN1AC Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received..: 07/10/10 MS Run #.....: 0193019
Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
Prep Batch #...: 0193034 Analysis Time..: 07:48
Dilution Factor: 1
% Moisture.....: 20 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	41	ug/kg
Disulfoton	ND	41	ug/kg
Famphur	ND	41	ug/kg
Methyl parathion	ND	41	ug/kg
Parathion	ND	41	ug/kg
Thionazin	ND	41	ug/kg
Phorate	ND	41	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	92	(47 - 130)	
Tributyl phosphate	99	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070802-002

GC Semivolatiles

Lot-Sample #...: C0G100441-002 Work Order #...: L32JP1AC Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received..: 07/10/10 MS Run #.....: 0193019
Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
Prep Batch #...: 0193034 Analysis Time..: 08:15
Dilution Factor: 0.99
% Moisture.....: 23 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	42	ug/kg
Disulfoton	ND	42	ug/kg
Famphur	ND	42	ug/kg
Methyl parathion	ND	42	ug/kg
Parathion	ND	42	ug/kg
Thionazin	ND	42	ug/kg
Phorate	ND	42	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	99	(47 - 130)	
Tributyl phosphate	110	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070802-003

GC Semivolatiles

Lot-Sample #...: C0G100441-003 **Work Order #...**: L32JQ1AC **Matrix.....**: SOLID
Date Sampled...: 07/06/10 **Date Received..**: 07/10/10 **MS Run #.....**: 0193019
Prep Date.....: 07/12/10 **Analysis Date..**: 07/16/10
Prep Batch #...: 0193034 **Analysis Time..**: 08:42
Dilution Factor: 1
% Moisture.....: 25 **Method.....**: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	44	ug/kg
Disulfoton	ND	44	ug/kg
Famphur	ND	44	ug/kg
Methyl parathion	ND	44	ug/kg
Parathion	ND	44	ug/kg
Thionazin	ND	44	ug/kg
Phorate	ND	44	ug/kg
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Triphenyl phosphate	103	(47 - 130)	
Tributyl phosphate	111	(55 - 125)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Phase Separation Sciences

Client Sample ID: 10070802-004

GC Semivolatiles

Lot-Sample #...: C0G100441-004 Work Order #...: L32JT1AC Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received..: 07/10/10 MS Run #.....: 0193019
Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
Prep Batch #...: 0193034 Analysis Time..: 09:08
Dilution Factor: 1
% Moisture.....: 30 Method.....: SW846 8141A

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Dimethoate	ND	47	ug/kg
Disulfoton	ND	47	ug/kg
Famphur	ND	47	ug/kg
Methyl parathion	ND	47	ug/kg
Parathion	ND	47	ug/kg
Thionazin	ND	47	ug/kg
Phorate	ND	47	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Triphenyl phosphate	72	(47 - 130)
Tributyl phosphate	76	(55 - 125)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: C0G100441
MB Lot-Sample #: C0G120000-034
Analysis Date...: 07/16/10
Dilution Factor: 1

Work Order #...: L32761AA
Prep Date.....: 07/12/10
Prep Batch #...: 0193034

Matrix.....: SOLID
Analysis Time...: 03:24

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Thionazin	ND	33	ug/kg	SW846 8141A
Dimethoate	ND	33	ug/kg	SW846 8141A
Disulfoton	ND	33	ug/kg	SW846 8141A
Famphur	ND	33	ug/kg	SW846 8141A
Methyl parathion	ND	33	ug/kg	SW846 8141A
Parathion	ND	33	ug/kg	SW846 8141A
Phorate	ND	33	ug/kg	SW846 8141A
	<u>PERCENT</u>	<u>RECOVERY</u>		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Triphenyl phosphate	69	(47 - 130)		
Tributyl phosphate	56	(55 - 125)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0G100441 Work Order #...: L32761AC Matrix.....: SOLID
 LCS Lot-Sample#: C0G120000-034
 Prep Date.....: 07/12/10 Analysis Date..: 07/16/10
 Prep Batch #...: 0193034 Analysis Time..: 09:35
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Thionazin	109	(48 - 126)	SW846 8141A
Phorate	111	(41 - 143)	SW846 8141A
Disulfoton	106	(31 - 136)	SW846 8141A
Methyl parathion	113	(43 - 146)	SW846 8141A
Parathion	131	(52 - 133)	SW846 8141A
Famphur	111	(54 - 137)	SW846 8141A
Dimethoate	113	(40 - 143)	SW846 8141A
Tetraethyldithiopyro- phosphate	107	(48 - 126)	SW846 8141A
O,O,O-Triethylphosphoro- thioate	106	(45 - 130)	SW846 8141A

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Triphenyl phosphate	70	(47 - 130)
Tributyl phosphate	71	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: C0G100441 Work Order #...: L301T1AE-MS Matrix.....: SOLID
 MS Lot-Sample #: C0G090463-001 L301T1AF-MSD
 Date Sampled...: 06/28/10 Date Received...: 07/09/10 MS Run #.....: 0193019
 Prep Date.....: 07/12/10 Analysis Date...: 07/16/10
 Prep Batch #...: 0193034 Analysis Time...: 02:04
 Dilution Factor: 1 % Moisture.....: 2.3

PARAMETER	PERCENT	RECOVERY	RPD		METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
Thionazin	92	(48 - 126)			SW846 8141A
	107	(48 - 126)	16	(0-27)	SW846 8141A
Phorate	98	(41 - 143)			SW846 8141A
	113	(41 - 143)	15	(0-30)	SW846 8141A
Disulfoton	90	(31 - 136)			SW846 8141A
	103	(31 - 136)	14	(0-30)	SW846 8141A
Methyl parathion	90	(43 - 146)			SW846 8141A
	109	(43 - 146)	20	(0-30)	SW846 8141A
Parathion	107	(52 - 133)			SW846 8141A
	136 a	(52 - 133)	23	(0-30)	SW846 8141A
Famphur	77	(54 - 137)			SW846 8141A
	80	(54 - 137)	3.5	(0-30)	SW846 8141A
Dimethoate	80	(40 - 143)			SW846 8141A
	72	(40 - 143)	11	(0-30)	SW846 8141A
Tetraethyldithiopyro- phosphate	89	(48 - 126)			SW846 8141A
	103	(48 - 126)	15	(0-28)	SW846 8141A
O,O,O-Triethylphosphoro- thioate	88	(45 - 130)			SW846 8141A
	104	(45 - 130)	16	(0-30)	SW846 8141A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Triphenyl phosphate	80	(47 - 130)
	78	(47 - 130)
Tributyl phosphate	88	(55 - 125)
	85	(55 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters
 Results and reporting limits have been adjusted for dry weight.
 a Spiked analyte recovery is outside stated control limits.

Phase Separation Sciences

Client Sample ID: 10070802-001

General Chemistry

Lot-Sample #...: COG100441-001 Work Order #...: L32JN Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received...: 07/10/10
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	80.3	1.0	%	SM20 2540G	07/12-07/13/10	0193232
			Dilution Factor: 1	Analysis Time..: 08:18	MS Run #.....: 0193152	
Total Sulfide	14.0 B	37.4	mg/kg	SW846 9030B/9034	07/12/10	0193167
			Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Phase Separation Sciences

Client Sample ID: 10070802-002

General Chemistry

Lot-Sample #...: COG100441-002 Work Order #...: L32JP Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received...: 07/10/10
% Moisture.....: 23

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	77.2	1.0	%	SM20 2540G	07/12-07/13/10	0193232
			Dilution Factor: 1	Analysis Time..: 08:18	MS Run #.....: 0193152	
Total Sulfide	11.4 B	38.9	mg/kg	SW846 9030B/9034	07/12/10	0193167
			Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:	

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Phase Separation Sciences

Client Sample ID: 10070802-003

General Chemistry

Lot-Sample #...: COG100441-003 Work Order #...: L32JQ Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received...: 07/10/10
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	75.4	1.0	%	SM20 2540G	07/12-07/13/10	0193232
				Dilution Factor: 1	Analysis Time..: 08:18	MS Run #.....: 0193152
Total Sulfide	10.6 B	39.8	mg/kg	SW846 9030B/9034	07/12/10	0193167
				Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:

NOTE(S):

RL Reporting Limit
Results and reporting limits have been adjusted for dry weight.
B Estimated result. Result is less than RL.

Phase Separation Sciences

Client Sample ID: 10070802-004

General Chemistry

Lot-Sample #...: COG100441-004 Work Order #...: L32JT Matrix.....: SOLID
Date Sampled...: 07/06/10 Date Received...: 07/10/10
% Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	70.0	1.0	%	SM20 2540G	07/12-07/13/10	0193232
				Dilution Factor: 1	Analysis Time..: 08:18	MS Run #.....: 0193152
Total Sulfide	20.6 B	42.9	mg/kg	SW846 9030B/9034	07/12/10	0193167
				Dilution Factor: 1	Analysis Time..: 14:25	MS Run #.....:

NOTE(S):

RL Reporting Limit
Results and reporting limits have been adjusted for dry weight.
B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: COG100441

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Sulfide	ND	Work Order #: L33FE1AA 30.0	mg/kg	MB Lot-Sample #: SW846 9030B/9034	COG120000-167 07/12/10	0193167
		Dilution Factor: 1				
		Analysis Time..: 14:25				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: C0G100441

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide		WO#:L33FE1AC-LCS/L33FE1AD-LCSD		LCS Lot-Sample#: C0G120000-167			
	100	(85 - 115)			SW846 9030B/9034	07/12/10	0193167
	98	(85 - 115)	1.7	(0-20)	SW846 9030B/9034	07/12/10	0193167
		Dilution Factor: 1		Analysis Time..: 14:25			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COG100441

Work Order #...: L3WE5-SMP
L3WE5-DUP

Matrix.....: SOLID

Date Sampled...: 07/06/10

Date Received...: 07/07/10

% Moisture.....: 23

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	76.5	73.1	%	4.6	(0-20)	SD Lot-Sample #: C0G070525-001 SM20 2540G	07/12-07/13/10	0193232
			Dilution Factor: 1			Analysis Time..: 08:18	MS Run Number..: 0193152	