Pace Analytical Services, Inc.
1233 Dublin Road
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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

November 07, 2012

Mr. Erik Corbin
Environmental Quality Mgmt, IN
1800 Carillon Blvd.
Cincinnati, OH 45240

RE: Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Dear Mr. Corbin:
Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Mick Mayse

mick.mayse@pacelabs.com
Project Manager

Enclosures

cc: Accounts Payable, Environmental Quality Mgmt, INC

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CERTIFICATIONS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Indiana Certification IDs
7726 Moller Road Indianapolis, IN 46268
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Ohio VAP: CL0065
Pennsylvania: 68-00791
West Virginia Certification #: 330

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SAMPLE SUMMARY

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5071669001	**HTF-Bldg. D Pit 1**	Solid	11/01/12 13:40	11/02/12 10:19
5071669002	**HTF-Bldg. D Pit 2**	Solid	11/01/12 13:45	11/02/12 10:19
5071669003	**HTF Rolloff 1**	Solid	11/01/12 13:50	11/02/12 10:19

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SAMPLE ANALYTE COUNT

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5071669001	**HTF-Bldg. D Pit 1**	EPA 6010	LLB	7
		EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 7471	LLB	1
		EPA 8270	KES	18
		EPA 8260	RSW	73
		EPA 8260	RSW	13
		ASTM D2974-87	DAE	1
		EPA 9045	TPD	1
5071669002	**HTF-Bldg. D Pit 2**	EPA 6010	LLB	7
		EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 7471	LLB	1
		ASTM D2974-87	DAE	1
5071669003	**HTF Rolloff 1**	EPA 6010	LLB	7
		EPA 6010	LLB	7
		EPA 7470	LLB	1
		EPA 7471	LLB	1
		ASTM D2974-87	DAE	1

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ANALYTICAL RESULTS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Sample: HTF-Bldg. D Pit 1 **Lab ID: 5071669001** Collected: 11/01/12 13:40 Received: 11/02/12 10:19 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	ND	mg/kg	2.0	1	11/02/12 14:52	11/05/12 23:08	7440-38-2	
Barium	**2.9**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 23:08	7440-39-3	
Cadmium	ND	mg/kg	99.2	50	11/02/12 14:52	11/06/12 14:10	7440-43-9	D3
Chromium	**406**	mg/kg	2.0	1	11/02/12 14:52	11/05/12 23:08	7440-47-3	
Lead	ND	mg/kg	99.2	50	11/02/12 14:52	11/06/12 14:10	7439-92-1	D3
Selenium	ND	mg/kg	99.2	50	11/02/12 14:52	11/06/12 14:10	7782-49-2	D3
Silver	ND	mg/kg	99.2	50	11/02/12 14:52	11/06/12 14:10	7440-22-4	D3
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/02/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:33	7440-38-2	
Barium	ND	mg/L	5.0	1	11/05/12 09:00	11/05/12 18:33	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/05/12 09:00	11/05/12 18:33	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:33	7440-47-3	
Lead	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:33	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:33	7782-49-2	
Silver	ND	mg/L	0.50	1	11/05/12 09:00	11/05/12 18:33	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/02/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/06/12 10:00	11/07/12 13:22	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.22	1	11/05/12 11:50	11/06/12 11:58	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 11/03/12 08:11							
1,4-Dichlorobenzene	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	106-46-7	
2,4-Dinitrotoluene	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	121-14-2	
Hexachloro-1,3-butadiene	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	87-68-3	
Hexachlorobenzene	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	118-74-1	
Hexachloroethane	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	67-72-1	
2-Methylphenol(o-Cresol)	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.20	1	11/05/12 11:10	11/06/12 03:33		
Nitrobenzene	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	98-95-3	
Pentachlorophenol	ND	mg/L	0.50	1	11/05/12 11:10	11/06/12 03:33	87-86-5	
Pyridine	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	110-86-1	
2,4,5-Trichlorophenol	ND	mg/L	0.50	1	11/05/12 11:10	11/06/12 03:33	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	11/05/12 11:10	11/06/12 03:33	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	70	%.	33-108	1	11/05/12 11:10	11/06/12 03:33	4165-60-0	
2-Fluorobiphenyl (S)	65	%.	34-106	1	11/05/12 11:10	11/06/12 03:33	321-60-8	
p-Terphenyl-d14 (S)	79	%.	31-122	1	11/05/12 11:10	11/06/12 03:33	1718-51-0	
Phenol-d5 (S)	19	%.	10-56	1	11/05/12 11:10	11/06/12 03:33	4165-62-2	
2-Fluorophenol (S)	33	%.	10-74	1	11/05/12 11:10	11/06/12 03:33	367-12-4	

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ANALYTICAL RESULTS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Sample: HTF-Bldg. D Pit 1 **Lab ID: 5071669001** Collected: 11/01/12 13:40 Received: 11/02/12 10:19 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
	Leachate Method/Date: EPA 1311; 11/03/12 08:11							
Surrogates								
2,4,6-Tribromophenol (S)	83	%.	32-124	1	11/05/12 11:10	11/06/12 03:33	118-79-6	
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Acetone	ND	mg/kg	0.11	1		11/06/12 22:09	67-64-1	
Acrolein	ND	mg/kg	0.11	1		11/06/12 22:09	107-02-8	
Acrylonitrile	ND	mg/kg	0.11	1		11/06/12 22:09	107-13-1	
Benzene	ND	mg/kg	0.0057	1		11/06/12 22:09	71-43-2	
Bromobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	108-86-1	
Bromochloromethane	ND	mg/kg	0.0057	1		11/06/12 22:09	74-97-5	
Bromodichloromethane	ND	mg/kg	0.0057	1		11/06/12 22:09	75-27-4	
Bromoform	ND	mg/kg	0.0057	1		11/06/12 22:09	75-25-2	
Bromomethane	ND	mg/kg	0.0057	1		11/06/12 22:09	74-83-9	
2-Butanone (MEK)	ND	mg/kg	0.029	1		11/06/12 22:09	78-93-3	
n-Butylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	98-06-6	
Carbon disulfide	ND	mg/kg	0.011	1		11/06/12 22:09	75-15-0	
Carbon tetrachloride	ND	mg/kg	0.0057	1		11/06/12 22:09	56-23-5	
Chlorobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	108-90-7	
Chloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	75-00-3	
Chloroform	ND	mg/kg	0.0057	1		11/06/12 22:09	67-66-3	
Chloromethane	ND	mg/kg	0.0057	1		11/06/12 22:09	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.0057	1		11/06/12 22:09	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.0057	1		11/06/12 22:09	106-43-4	
Dibromochloromethane	ND	mg/kg	0.0057	1		11/06/12 22:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0057	1		11/06/12 22:09	106-93-4	
Dibromomethane	ND	mg/kg	0.0057	1		11/06/12 22:09	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	106-46-7	
trans-1,4-Dichloro-2-butene	ND	mg/kg	0.11	1		11/06/12 22:09	110-57-6	
Dichlorodifluoromethane	ND	mg/kg	0.0057	1		11/06/12 22:09	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	107-06-2	
1,1-Dichloroethene	ND	mg/kg	0.0057	1		11/06/12 22:09	75-35-4	
cis-1,2-Dichloroethene	ND	mg/kg	0.0057	1		11/06/12 22:09	156-59-2	
trans-1,2-Dichloroethene	ND	mg/kg	0.0057	1		11/06/12 22:09	156-60-5	
1,2-Dichloropropane	ND	mg/kg	0.0057	1		11/06/12 22:09	78-87-5	
1,3-Dichloropropane	ND	mg/kg	0.0057	1		11/06/12 22:09	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.0057	1		11/06/12 22:09	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.0057	1		11/06/12 22:09	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.0057	1		11/06/12 22:09	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/kg	0.0057	1		11/06/12 22:09	10061-02-6	
Ethylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	100-41-4	

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ANALYTICAL RESULTS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Sample: HTF-Bldg. D Pit 1 **Lab ID: 5071669001** Collected: 11/01/12 13:40 Received: 11/02/12 10:19 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Ethyl methacrylate	ND	mg/kg	0.11	1		11/06/12 22:09	97-63-2	
Hexachloro-1,3-butadiene	ND	mg/kg	0.0057	1		11/06/12 22:09	87-68-3	
n-Hexane	ND	mg/kg	0.0057	1		11/06/12 22:09	110-54-3	N2
2-Hexanone	ND	mg/kg	0.11	1		11/06/12 22:09	591-78-6	
Iodomethane	ND	mg/kg	0.11	1		11/06/12 22:09	74-88-4	
Isopropylbenzene (Cumene)	ND	mg/kg	0.0057	1		11/06/12 22:09	98-82-8	
p-Isopropyltoluene	ND	mg/kg	0.0057	1		11/06/12 22:09	99-87-6	
Methylene Chloride	ND	mg/kg	0.023	1		11/06/12 22:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.029	1		11/06/12 22:09	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.0057	1		11/06/12 22:09	1634-04-4	
Naphthalene	ND	mg/kg	0.0057	1		11/06/12 22:09	91-20-3	
n-Propylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	103-65-1	
Styrene	ND	mg/kg	0.0057	1		11/06/12 22:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	79-34-5	
Tetrachloroethene	ND	mg/kg	0.0057	1		11/06/12 22:09	127-18-4	
Toluene	ND	mg/kg	0.0057	1		11/06/12 22:09	108-88-3	
1,2,3-Trichlorobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	71-55-6	
1,1,2-Trichloroethane	ND	mg/kg	0.0057	1		11/06/12 22:09	79-00-5	
Trichloroethene	ND	mg/kg	0.0057	1		11/06/12 22:09	79-01-6	
Trichlorofluoromethane	ND	mg/kg	0.0057	1		11/06/12 22:09	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.0057	1		11/06/12 22:09	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0057	1		11/06/12 22:09	108-67-8	
Vinyl acetate	ND	mg/kg	0.11	1		11/06/12 22:09	108-05-4	
Vinyl chloride	ND	mg/kg	0.0057	1		11/06/12 22:09	75-01-4	
Xylene (Total)	ND	mg/kg	0.011	1		11/06/12 22:09	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96	%.	71-125	1		11/06/12 22:09	1868-53-7	
Toluene-d8 (S)	107	%.	76-124	1		11/06/12 22:09	2037-26-5	
4-Bromofluorobenzene (S)	82	%.	67-134	1		11/06/12 22:09	460-00-4	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Benzene	ND	mg/L	0.050	1		11/07/12 12:24	71-43-2	
2-Butanone (MEK)	ND	mg/L	1.0	1		11/07/12 12:24	78-93-3	
Carbon tetrachloride	ND	mg/L	0.050	1		11/07/12 12:24	56-23-5	
Chlorobenzene	ND	mg/L	0.050	1		11/07/12 12:24	108-90-7	
Chloroform	ND	mg/L	0.050	1		11/07/12 12:24	67-66-3	
1,2-Dichloroethane	ND	mg/L	0.050	1		11/07/12 12:24	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.050	1		11/07/12 12:24	75-35-4	
Tetrachloroethene	ND	mg/L	0.050	1		11/07/12 12:24	127-18-4	
Trichloroethene	ND	mg/L	0.050	1		11/07/12 12:24	79-01-6	
Vinyl chloride	ND	mg/L	0.020	1		11/07/12 12:24	75-01-4	

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ANALYTICAL RESULTS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Sample: HTF-Bldg. D Pit 1 **Lab ID: 5071669001** Collected: 11/01/12 13:40 Received: 11/02/12 10:19 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 11/06/12 12:00							
Surrogates								
Toluene-d8 (S)	98	%.	81-114	1		11/07/12 12:24	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	72-125	1		11/07/12 12:24	460-00-4	
Dibromofluoromethane (S)	91	%.	83-123	1		11/07/12 12:24	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.0**	%	0.10	1		11/02/12 16:27		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**7.8**	Std. Units		1		11/06/12 08:15		

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ANALYTICAL RESULTS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Sample: HTF-Bldg. D Pit 2 **Lab ID: 5071669002** Collected: 11/01/12 13:45 Received: 11/02/12 10:19 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	ND	mg/kg	2.1	1	11/02/12 14:52	11/05/12 23:11	7440-38-2	
Barium	**11.0**	mg/kg	2.1	1	11/02/12 14:52	11/05/12 23:11	7440-39-3	
Cadmium	ND	mg/kg	107	50	11/02/12 14:52	11/06/12 14:13	7440-43-9	D3
Chromium	**494**	mg/kg	2.1	1	11/02/12 14:52	11/05/12 23:11	7440-47-3	
Lead	ND	mg/kg	107	50	11/02/12 14:52	11/06/12 14:13	7439-92-1	D3
Selenium	ND	mg/kg	107	50	11/02/12 14:52	11/06/12 14:13	7782-49-2	D3
Silver	ND	mg/kg	107	50	11/02/12 14:52	11/06/12 14:13	7440-22-4	D3
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/02/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:39	7440-38-2	
Barium	ND	mg/L	5.0	1	11/05/12 09:00	11/05/12 18:39	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/05/12 09:00	11/05/12 18:39	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:39	7440-47-3	
Lead	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:39	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:39	7782-49-2	
Silver	ND	mg/L	0.50	1	11/05/12 09:00	11/05/12 18:39	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/02/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/06/12 10:00	11/07/12 13:26	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.23	1	11/05/12 11:50	11/06/12 12:00	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**11.9**	%	0.10	1		11/02/12 16:27		

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ANALYTICAL RESULTS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Sample: HTF Rolloff 1 **Lab ID: 5071669003** Collected: 11/01/12 13:50 Received: 11/02/12 10:19 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	ND	mg/kg	1.9	1	11/02/12 14:52	11/05/12 23:15	7440-38-2	
Barium	**23.0**	mg/kg	1.9	1	11/02/12 14:52	11/05/12 23:15	7440-39-3	
Cadmium	ND	mg/kg	96.1	50	11/02/12 14:52	11/06/12 14:27	7440-43-9	D3
Chromium	**671**	mg/kg	1.9	1	11/02/12 14:52	11/05/12 23:15	7440-47-3	
Lead	ND	mg/kg	96.1	50	11/02/12 14:52	11/06/12 14:27	7439-92-1	D3
Selenium	ND	mg/kg	96.1	50	11/02/12 14:52	11/06/12 14:27	7782-49-2	D3
Silver	ND	mg/kg	96.1	50	11/02/12 14:52	11/06/12 14:27	7440-22-4	D3
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Leachate Method/Date: EPA 1311; 11/02/12 12:00							
Arsenic	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:43	7440-38-2	
Barium	ND	mg/L	5.0	1	11/05/12 09:00	11/05/12 18:43	7440-39-3	
Cadmium	ND	mg/L	0.050	1	11/05/12 09:00	11/05/12 18:43	7440-43-9	
Chromium	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:43	7440-47-3	
Lead	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:43	7439-92-1	
Selenium	ND	mg/L	0.10	1	11/05/12 09:00	11/05/12 18:43	7782-49-2	
Silver	ND	mg/L	0.50	1	11/05/12 09:00	11/05/12 18:43	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
	Leachate Method/Date: EPA 1311; 11/02/12 12:00							
Mercury	ND	mg/L	0.0020	1	11/06/12 10:00	11/07/12 13:32	7439-97-6	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.20	1	11/05/12 11:50	11/06/12 12:02	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**1.8**	%	0.10	1		11/02/12 16:27		

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: MERP/4238 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 5071669001, 5071669002, 5071669003

METHOD BLANK: 825660 Matrix: Water
Associated Lab Samples: 5071669001, 5071669002, 5071669003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	11/07/12 12:57	

LABORATORY CONTROL SAMPLE & LCSD: 825661 825662

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/L	.015	0.018	0.018	117	120	80-120		20	

MATRIX SPIKE SAMPLE: 825663

Parameter	Units	5071528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.018	118	75-125	

MATRIX SPIKE SAMPLE: 825664

Parameter	Units	5071531001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.018	120	75-125	

MATRIX SPIKE SAMPLE: 825665

Parameter	Units	5071556001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.018	123	75-125	

MATRIX SPIKE SAMPLE: 825666

Parameter	Units	5071669001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.018	122	75-125	

MATRIX SPIKE SAMPLE: 826278

Parameter	Units	5071767001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	116	75-125	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: MERP/4237 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 5071669001, 5071669002, 5071669003

METHOD BLANK: 825547 Matrix: Solid
Associated Lab Samples: 5071669001, 5071669002, 5071669003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.20	11/06/12 11:00	

LABORATORY CONTROL SAMPLE: 825548

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.5	0.46	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825549 825550

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.88	.46	.46	1.5	1.2	137	69	75-125	23	20	1d,M3

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825551 825552

Parameter	Units	5071633003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.84	.64	.66	1.2	1.5	60	96	75-125	18	20	M0

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: MPRP/10137 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 5071669001, 5071669002, 5071669003

METHOD BLANK: 825195 Matrix: Solid
Associated Lab Samples: 5071669001, 5071669002, 5071669003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.0	11/05/12 21:31	
Barium	mg/kg	ND	2.0	11/05/12 21:31	
Cadmium	mg/kg	ND	2.0	11/05/12 21:31	
Chromium	mg/kg	ND	2.0	11/05/12 21:31	
Lead	mg/kg	ND	2.0	11/05/12 21:31	
Selenium	mg/kg	ND	2.0	11/05/12 21:31	
Silver	mg/kg	ND	2.0	11/05/12 21:31	

LABORATORY CONTROL SAMPLE: 825196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	50.4	101	80-120	
Barium	mg/kg	50	50.4	101	80-120	
Cadmium	mg/kg	50	50.2	100	80-120	
Chromium	mg/kg	50	51.6	103	80-120	
Lead	mg/kg	50	49.3	99	80-120	
Selenium	mg/kg	50	50.9	102	80-120	
Silver	mg/kg	25	24.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 825197 825198

Parameter	Units	5071481007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	6.4	48	45.1	58.5	55.6	108	109	75-125	5	20	
Barium	mg/kg	17.2	48	45.1	73.1	66.5	116	109	75-125	9	20	
Cadmium	mg/kg	1520	48	45.1	2620	1840	2300	715	75-125	35	20	P6,R2
Chromium	mg/kg	704	48	45.1	935	814	480	243	75-125	14	20	P6
Lead	mg/kg	619	48	45.1	493	518	-261	-223	75-125	5	20	P6
Selenium	mg/kg	102	48	45.1	142	159	83	126	75-125	11	20	M0
Silver	mg/kg	10	24	22.5	34.7	32.0	103	98	75-125	8	20	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: MPRP/10146 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 5071669001, 5071669002, 5071669003

METHOD BLANK: 825576 Matrix: Water
Associated Lab Samples: 5071669001, 5071669002, 5071669003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.10	11/05/12 16:36	
Barium	mg/L	ND	5.0	11/05/12 16:36	
Cadmium	mg/L	ND	0.050	11/05/12 16:36	
Chromium	mg/L	ND	0.10	11/05/12 16:36	
Lead	mg/L	ND	0.10	11/05/12 16:36	
Selenium	mg/L	ND	0.10	11/05/12 16:36	
Silver	mg/L	ND	0.50	11/05/12 16:36	

LABORATORY CONTROL SAMPLE & LCSD: 825577 825578

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	10	10.2	10.0	102	100	80-120	2	20	
Barium	mg/L	10	10.2	10.0	102	100	80-120	1	20	
Cadmium	mg/L	10	10.2	10.0	102	100	80-120	1	20	
Chromium	mg/L	10	10.0	9.9	100	99	80-120	1	20	
Lead	mg/L	10	9.8	9.6	98	96	80-120	1	20	
Selenium	mg/L	10	10.4	10.2	104	102	80-120	2	20	
Silver	mg/L	5	5.0	5.0	100	100	80-120	.9	20	

MATRIX SPIKE SAMPLE: 825579

Parameter	Units	5070616024 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.1	101	50-150	
Barium	mg/L	ND	10	10.4	101	50-150	
Cadmium	mg/L	ND	10	10.1	101	50-150	
Chromium	mg/L	ND	10	9.9	99	50-150	
Lead	mg/L	0.60	10	10.2	96	50-150	
Selenium	mg/L	ND	10	10.3	103	50-150	
Silver	mg/L	ND	5	5.0	99	50-150	

MATRIX SPIKE SAMPLE: 825580

Parameter	Units	5071528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.1	101	50-150	
Barium	mg/L	ND	10	10.6	102	50-150	
Cadmium	mg/L	ND	10	10.2	102	50-150	
Chromium	mg/L	ND	10	9.9	99	50-150	
Lead	mg/L	ND	10	9.6	96	50-150	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

MATRIX SPIKE SAMPLE: 825580

Parameter	Units	5071528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	ND	10	10.3	103	50-150	
Silver	mg/L	ND	5	5.0	101	50-150	

MATRIX SPIKE SAMPLE: 825581

Parameter	Units	5071531001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.5	105	50-150	
Barium	mg/L	ND	10	10.7	106	50-150	
Cadmium	mg/L	ND	10	10.6	106	50-150	
Chromium	mg/L	0.11	10	10.3	102	50-150	
Lead	mg/L	ND	10	9.9	99	50-150	
Selenium	mg/L	ND	10	10.7	107	50-150	
Silver	mg/L	ND	5	5.2	103	50-150	

MATRIX SPIKE SAMPLE: 825582

Parameter	Units	5071556001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.8	108	50-150	
Barium	mg/L	ND	10	10.7	107	50-150	
Cadmium	mg/L	ND	10	10.7	107	50-150	
Chromium	mg/L	ND	10	10.4	103	50-150	
Lead	mg/L	ND	10	10.1	101	50-150	
Selenium	mg/L	ND	10	11.0	110	50-150	
Silver	mg/L	ND	5	5.2	104	50-150	

MATRIX SPIKE SAMPLE: 825583

Parameter	Units	5071656001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	376 ug/L	10	10.9	105	50-150	
Barium	mg/L	ND	10	10.8	105	50-150	
Cadmium	mg/L	ND	10	10.5	105	50-150	
Chromium	mg/L	ND	10	10.2	102	50-150	
Lead	mg/L	747000 ug/L	10	708	-383	50-150	P6
Selenium	mg/L	ND	10	10.8	108	50-150	
Silver	mg/L	ND	5	5.1	103	50-150	

MATRIX SPIKE SAMPLE: 825584

Parameter	Units	5071657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.7	107	50-150	
Barium	mg/L	ND	10	10.6	103	50-150	
Cadmium	mg/L	ND	10	10.4	104	50-150	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

MATRIX SPIKE SAMPLE: 825584

Parameter	Units	5071657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium	mg/L	ND	10	10.1	101	50-150	
Lead	mg/L	38.5	10	39.2	7	50-150	M0
Selenium	mg/L	ND	10	10.8	108	50-150	
Silver	mg/L	ND	5	5.1	103	50-150	

MATRIX SPIKE SAMPLE: 825585

Parameter	Units	5071669001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.7	107	50-150	
Barium	mg/L	ND	10	10.6	105	50-150	
Cadmium	mg/L	ND	10	10.6	106	50-150	
Chromium	mg/L	ND	10	10.2	102	50-150	
Lead	mg/L	ND	10	10	100	50-150	
Selenium	mg/L	ND	10	10.9	109	50-150	
Silver	mg/L	ND	5	5.2	103	50-150	

MATRIX SPIKE SAMPLE: 825586

Parameter	Units	5071286002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.2	102	50-150	
Barium	mg/L	ND	10	10.4	98	50-150	
Cadmium	mg/L	ND	10	10.0	100	50-150	
Chromium	mg/L	ND	10	9.8	98	50-150	
Lead	mg/L	ND	10	9.6	96	50-150	
Selenium	mg/L	ND	10	10.3	103	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: MSV/47572
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5030 Low
Associated Lab Samples: 5071669001

METHOD BLANK: 826595
Matrix: Solid
Associated Lab Samples: 5071669001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
1,1,1-Trichloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
1,1,2-Trichloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
1,1-Dichloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
1,1-Dichloroethene	mg/kg	ND	0.0050	11/06/12 21:31	
1,1-Dichloropropene	mg/kg	ND	0.0050	11/06/12 21:31	
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
1,2,3-Trichloropropane	mg/kg	ND	0.0050	11/06/12 21:31	
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	11/06/12 21:31	
1,2-Dichlorobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
1,2-Dichloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
1,2-Dichloropropane	mg/kg	ND	0.0050	11/06/12 21:31	
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
1,3-Dichlorobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
1,3-Dichloropropane	mg/kg	ND	0.0050	11/06/12 21:31	
1,4-Dichlorobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
2,2-Dichloropropane	mg/kg	ND	0.0050	11/06/12 21:31	
2-Butanone (MEK)	mg/kg	ND	0.025	11/06/12 21:31	
2-Chlorotoluene	mg/kg	ND	0.0050	11/06/12 21:31	
2-Hexanone	mg/kg	ND	0.10	11/06/12 21:31	
4-Chlorotoluene	mg/kg	ND	0.0050	11/06/12 21:31	
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.025	11/06/12 21:31	
Acetone	mg/kg	ND	0.10	11/06/12 21:31	
Acrolein	mg/kg	ND	0.10	11/06/12 21:31	
Acrylonitrile	mg/kg	ND	0.10	11/06/12 21:31	
Benzene	mg/kg	ND	0.0050	11/06/12 21:31	
Bromobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
Bromochloromethane	mg/kg	ND	0.0050	11/06/12 21:31	
Bromodichloromethane	mg/kg	ND	0.0050	11/06/12 21:31	
Bromoform	mg/kg	ND	0.0050	11/06/12 21:31	
Bromomethane	mg/kg	ND	0.0050	11/06/12 21:31	
Carbon disulfide	mg/kg	ND	0.010	11/06/12 21:31	
Carbon tetrachloride	mg/kg	ND	0.0050	11/06/12 21:31	
Chlorobenzene	mg/kg	ND	0.0050	11/06/12 21:31	
Chloroethane	mg/kg	ND	0.0050	11/06/12 21:31	
Chloroform	mg/kg	ND	0.0050	11/06/12 21:31	
Chloromethane	mg/kg	ND	0.0050	11/06/12 21:31	
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	11/06/12 21:31	
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	11/06/12 21:31	
Dibromochloromethane	mg/kg	ND	0.0050	11/06/12 21:31	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

METHOD BLANK: 826595 Matrix: Solid

Associated Lab Samples: 5071669001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	mg/kg	ND	0.0050	11/06/12 21:31	
Dichlorodifluoromethane	mg/kg	ND	0.0050	11/06/12 21:31	
Ethyl methacrylate	mg/kg	ND	0.10	11/06/12 21:31	
Ethylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
Hexachloro-1,3-butadiene	mg/kg	ND	0.0050	11/06/12 21:31	
Iodomethane	mg/kg	ND	0.10	11/06/12 21:31	
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	11/06/12 21:31	
Methyl-tert-butyl ether	mg/kg	ND	0.0050	11/06/12 21:31	
Methylene Chloride	mg/kg	ND	0.020	11/06/12 21:31	
n-Butylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
n-Hexane	mg/kg	ND	0.0050	11/06/12 21:31	N2
n-Propylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
Naphthalene	mg/kg	ND	0.0050	11/06/12 21:31	
p-Isopropyltoluene	mg/kg	ND	0.0050	11/06/12 21:31	
sec-Butylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
Styrene	mg/kg	ND	0.0050	11/06/12 21:31	
tert-Butylbenzene	mg/kg	ND	0.0050	11/06/12 21:31	
Tetrachloroethene	mg/kg	ND	0.0050	11/06/12 21:31	
Toluene	mg/kg	ND	0.0050	11/06/12 21:31	
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	11/06/12 21:31	
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	11/06/12 21:31	
trans-1,4-Dichloro-2-butene	mg/kg	ND	0.10	11/06/12 21:31	
Trichloroethene	mg/kg	ND	0.0050	11/06/12 21:31	
Trichlorofluoromethane	mg/kg	ND	0.0050	11/06/12 21:31	
Vinyl acetate	mg/kg	ND	0.10	11/06/12 21:31	
Vinyl chloride	mg/kg	ND	0.0050	11/06/12 21:31	
Xylene (Total)	mg/kg	ND	0.010	11/06/12 21:31	
4-Bromofluorobenzene (S)	%.	104	67-134	11/06/12 21:31	
Dibromofluoromethane (S)	%.	95	71-125	11/06/12 21:31	
Toluene-d8 (S)	%.	99	76-124	11/06/12 21:31	

LABORATORY CONTROL SAMPLE: 826596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	.05	0.042	84	68-125	
1,1,1-Trichloroethane	mg/kg	.05	0.045	91	63-124	
1,1,2,2-Tetrachloroethane	mg/kg	.05	0.046	93	73-123	
1,1,2-Trichloroethane	mg/kg	.05	0.052	104	70-124	
1,1-Dichloroethane	mg/kg	.05	0.047	93	63-122	
1,1-Dichloroethene	mg/kg	.05	0.045	89	71-129	
1,1-Dichloropropene	mg/kg	.05	0.048	95	71-122	
1,2,3-Trichlorobenzene	mg/kg	.05	0.047	95	68-123	
1,2,3-Trichloropropane	mg/kg	.05	0.045	90	47-117	
1,2,4-Trichlorobenzene	mg/kg	.05	0.046	93	68-125	
1,2,4-Trimethylbenzene	mg/kg	.05	0.042	84	69-120	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

LABORATORY CONTROL SAMPLE: 826596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	mg/kg	.05	0.048	96	67-121	
1,2-Dichlorobenzene	mg/kg	.05	0.044	88	71-121	
1,2-Dichloroethane	mg/kg	.05	0.046	92	74-120	
1,2-Dichloropropane	mg/kg	.05	0.047	93	71-117	
1,3,5-Trimethylbenzene	mg/kg	.05	0.040	80	64-119	
1,3-Dichlorobenzene	mg/kg	.05	0.044	88	70-122	
1,3-Dichloropropane	mg/kg	.05	0.048	97	68-118	
1,4-Dichlorobenzene	mg/kg	.05	0.044	89	71-118	
2,2-Dichloropropane	mg/kg	.05	0.044	88	62-119	
2-Butanone (MEK)	mg/kg	.25	0.26	104	38-154	
2-Chlorotoluene	mg/kg	.05	0.047	94	71-120	
2-Hexanone	mg/kg	.25	0.26	104	50-134	
4-Chlorotoluene	mg/kg	.05	0.047	94	72-123	
4-Methyl-2-pentanone (MIBK)	mg/kg	.25	0.24	97	66-122	
Acetone	mg/kg	.25	0.25	101	10-200	
Acrolein	mg/kg	1	1.6	156	11-200	
Acrylonitrile	mg/kg	1	0.98	98	66-120	
Benzene	mg/kg	.05	0.044	87	73-115	
Bromobenzene	mg/kg	.05	0.051	102	64-130	
Bromochloromethane	mg/kg	.05	0.048	97	71-127	
Bromodichloromethane	mg/kg	.05	0.047	94	60-121	
Bromoform	mg/kg	.05	0.038	77	44-130	
Bromomethane	mg/kg	.05	0.048	96	48-175	
Carbon disulfide	mg/kg	.1	0.086	86	71-126	
Carbon tetrachloride	mg/kg	.05	0.045	90	57-127	
Chlorobenzene	mg/kg	.05	0.046	91	72-121	
Chloroethane	mg/kg	.05	0.044	89	72-141	
Chloroform	mg/kg	.05	0.045	91	74-114	
Chloromethane	mg/kg	.05	0.039	79	51-126	
cis-1,2-Dichloroethene	mg/kg	.05	0.043	87	72-115	
cis-1,3-Dichloropropene	mg/kg	.05	0.048	96	64-115	
Dibromochloromethane	mg/kg	.05	0.042	84	58-114	
Dibromomethane	mg/kg	.05	0.047	94	73-120	
Dichlorodifluoromethane	mg/kg	.05	0.040	80	32-167	
Ethyl methacrylate	mg/kg	.2	0.19	94	65-117	
Ethylbenzene	mg/kg	.05	0.044	88	73-120	
Hexachloro-1,3-butadiene	mg/kg	.05	0.033	66	65-121	
Iodomethane	mg/kg	.1	.082J	82	45-156	
Isopropylbenzene (Cumene)	mg/kg	.05	0.040	80	74-123	
Methyl-tert-butyl ether	mg/kg	.1	0.091	91	69-123	
Methylene Chloride	mg/kg	.05	0.044	87	58-124	
n-Butylbenzene	mg/kg	.05	0.042	85	71-118	
n-Hexane	mg/kg	.05	0.037	74	50-106	N2
n-Propylbenzene	mg/kg	.05	0.044	87	70-120	
Naphthalene	mg/kg	.05	0.049	98	67-124	
p-Isopropyltoluene	mg/kg	.05	0.042	83	71-123	
sec-Butylbenzene	mg/kg	.05	0.040	80	66-122	
Styrene	mg/kg	.05	0.044	89	75-118	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

LABORATORY CONTROL SAMPLE: 826596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	mg/kg	.05	0.035	71	54-124	
Tetrachloroethene	mg/kg	.05	0.043	85	66-126	
Toluene	mg/kg	.05	0.045	90	69-115	
trans-1,2-Dichloroethene	mg/kg	.05	0.042	84	69-120	
trans-1,3-Dichloropropene	mg/kg	.05	0.042	84	61-116	
trans-1,4-Dichloro-2-butene	mg/kg	.2	0.21	104	59-130	
Trichloroethene	mg/kg	.05	0.043	87	71-117	
Trichlorofluoromethane	mg/kg	.05	0.052	105	67-138	
Vinyl acetate	mg/kg	.2	0.12	60	35-134	
Vinyl chloride	mg/kg	.05	0.042	83	64-127	
Xylene (Total)	mg/kg	.15	0.13	87	69-117	
4-Bromofluorobenzene (S)	%.			98	67-134	
Dibromofluoromethane (S)	%.			97	71-125	
Toluene-d8 (S)	%.			100	76-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 826597 826598

Parameter	Units	5071669001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	mg/kg	ND	.057	.057	0.046	0.047	80	82	10-111		20	
1,1,1-Trichloroethane	mg/kg	ND	.057	.057	0.051	0.054	89	95	36-128		20	
1,1,2,2-Tetrachloroethane	mg/kg	ND	.057	.057	0.069	0.072	120	125	10-130		20	
1,1,2-Trichloroethane	mg/kg	ND	.057	.057	0.061	0.065	106	114	10-126		20	
1,1-Dichloroethane	mg/kg	ND	.057	.057	0.054	0.058	94	101	39-126		20	
1,1-Dichloroethene	mg/kg	ND	.057	.057	0.052	0.056	91	98	42-147		20	
1,1-Dichloropropene	mg/kg	ND	.057	.057	0.050	0.054	87	94	29-129		20	
1,2,3-Trichlorobenzene	mg/kg	ND	.057	.057	0.021	0.019	36	33	10-91		20	
1,2,3-Trichloropropane	mg/kg	ND	.057	.057	0.070	0.075	122	130	10-99		20	M0
1,2,4-Trichlorobenzene	mg/kg	ND	.057	.057	0.024	0.023	42	40	10-88		20	
1,2,4-Trimethylbenzene	mg/kg	ND	.057	.057	0.038	0.038	57	57	10-109		20	
1,2-Dibromoethane (EDB)	mg/kg	ND	.057	.057	0.055	0.059	96	103	10-119		20	
1,2-Dichlorobenzene	mg/kg	ND	.057	.057	0.041	0.043	72	74	10-104		20	
1,2-Dichloroethane	mg/kg	ND	.057	.057	0.051	0.054	89	93	19-126		20	
1,2-Dichloropropane	mg/kg	ND	.057	.057	0.051	0.054	89	95	24-123		20	
1,3,5-Trimethylbenzene	mg/kg	ND	.057	.057	0.037	0.038	55	56	10-118		20	
1,3-Dichlorobenzene	mg/kg	ND	.057	.057	0.038	0.040	67	70	10-108		20	
1,3-Dichloropropane	mg/kg	ND	.057	.057	0.056	0.060	98	104	12-121		20	
1,4-Dichlorobenzene	mg/kg	ND	.057	.057	0.039	0.042	68	73	10-104		20	
2,2-Dichloropropane	mg/kg	ND	.057	.057	0.052	0.055	91	96	32-124		20	
2-Butanone (MEK)	mg/kg	ND	.29	.29	0.28	0.30	96	103	10-183		20	
2-Chlorotoluene	mg/kg	ND	.057	.057	0.046	0.045	79	78	10-128		20	
2-Hexanone	mg/kg	ND	.29	.29	0.28	0.32	99	112	10-158		20	
4-Chlorotoluene	mg/kg	ND	.057	.057	0.043	0.046	75	81	10-119		20	
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	.29	.29	0.30	0.32	102	109	12-130		20	
Acetone	mg/kg	ND	.29	.29	0.33	0.33	110	112	10-200		20	
Acrolein	mg/kg	ND	1.1	1.1	0.41	0.48	36	42	10-200		20	
Acrylonitrile	mg/kg	ND	1.1	1.1	1.1	1.1	92	99	19-130		20	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 826597 826598

Parameter	Units	5071669001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	mg/kg	ND	.057	.057	0.048	0.051	83	88	23-138		20	
Bromobenzene	mg/kg	ND	.057	.057	0.043	0.046	75	79	10-111		20	
Bromochloromethane	mg/kg	ND	.057	.057	0.055	0.057	95	100	26-126		20	
Bromodichloromethane	mg/kg	ND	.057	.057	0.049	0.053	85	92	10-120		20	
Bromoform	mg/kg	ND	.057	.057	0.049	0.053	86	92	10-106		20	
Bromomethane	mg/kg	ND	.057	.057	0.057	0.057	99	99	10-190		20	
Carbon disulfide	mg/kg	ND	.11	.11	0.093	0.10	81	90	31-128		20	
Carbon tetrachloride	mg/kg	ND	.057	.057	0.048	0.051	83	89	26-126		20	
Chlorobenzene	mg/kg	ND	.057	.057	0.043	0.045	74	79	10-120		20	
Chloroethane	mg/kg	ND	.057	.057	0.052	0.064	90	111	18-186		20	R1
Chloroform	mg/kg	ND	.057	.057	0.052	0.055	90	96	29-126		20	
Chloromethane	mg/kg	ND	.057	.057	0.050	0.059	88	103	34-131		20	
cis-1,2-Dichloroethene	mg/kg	ND	.057	.057	0.049	0.052	85	90	28-132		20	
cis-1,3-Dichloropropene	mg/kg	ND	.057	.057	0.053	0.059	92	102	10-108		20	
Dibromochloromethane	mg/kg	ND	.057	.057	0.046	0.048	80	84	10-108		20	
Dibromomethane	mg/kg	ND	.057	.057	0.050	0.054	88	93	13-122		20	
Dichlorodifluoromethane	mg/kg	ND	.057	.057	0.051	0.057	89	99	10-197		20	
Ethyl methacrylate	mg/kg	ND	.23	.23	.096J	ND	42	46	10-130		20	
Ethylbenzene	mg/kg	ND	.057	.057	0.037	0.039	64	68	10-135		20	
Hexachloro-1,3-butadiene	mg/kg	ND	.057	.057	0.015	0.013	26	23	10-105		20	
Iodomethane	mg/kg	ND	.11	.11	.094J	.1J	82	89	10-163		20	
Isopropylbenzene (Cumene)	mg/kg	ND	.057	.057	0.030	0.031	53	54	10-121		20	
Methyl-tert-butyl ether	mg/kg	ND	.11	.11	0.11	0.11	93	97	20-140		20	
Methylene Chloride	mg/kg	ND	.057	.057	0.058	0.063	78	87	28-131		20	
n-Butylbenzene	mg/kg	ND	.057	.057	0.026	0.027	46	46	10-110		20	
n-Hexane	mg/kg	ND	.057	.057	0.041	0.044	71	77	21-150		20	N2
n-Propylbenzene	mg/kg	ND	.057	.057	0.037	0.038	64	66	10-123		20	
Naphthalene	mg/kg	ND	.057	.057	0.034	0.033	59	57	10-106		20	
p-Isopropyltoluene	mg/kg	ND	.057	.057	0.031	0.031	53	53	10-117		20	
sec-Butylbenzene	mg/kg	ND	.057	.057	0.032	0.032	56	56	10-123		20	
Styrene	mg/kg	ND	.057	.057	0.038	0.041	65	71	10-119		20	
tert-Butylbenzene	mg/kg	ND	.057	.057	0.032	0.032	55	56	10-105		20	
Tetrachloroethene	mg/kg	ND	.057	.057	0.039	0.042	68	73	10-122		20	
Toluene	mg/kg	ND	.057	.057	0.047	0.050	80	85	10-131		20	
trans-1,2-Dichloroethene	mg/kg	ND	.057	.057	0.047	0.050	81	87	32-136		20	
trans-1,3-Dichloropropene	mg/kg	ND	.057	.057	0.046	0.049	81	85	10-101		20	
trans-1,4-Dichloro-2-butene	mg/kg	ND	.23	.23	0.18	0.18	77	80	10-104		20	
Trichloroethene	mg/kg	ND	.057	.057	0.044	0.047	77	82	15-133		20	
Trichlorofluoromethane	mg/kg	ND	.057	.057	0.062	0.066	108	114	37-152		20	
Vinyl acetate	mg/kg	ND	.23	.23	ND	ND	.6	.5	10-103		20	M0
Vinyl chloride	mg/kg	ND	.057	.057	0.051	0.056	89	97	41-147		20	
Xylene (Total)	mg/kg	ND	.17	.17	0.11	0.12	64	68	10-131		20	
4-Bromofluorobenzene (S)	%.						88	90	67-134		20	
Dibromofluoromethane (S)	%.						99	99	71-125		20	
Toluene-d8 (S)	%.						105	105	76-124		20	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: MSV/47594
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 5071669001

METHOD BLANK: 826915
Matrix: Water
Associated Lab Samples: 5071669001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	ND	0.050	11/07/12 11:46	
1,2-Dichloroethane	mg/L	ND	0.050	11/07/12 11:46	
2-Butanone (MEK)	mg/L	ND	1.0	11/07/12 11:46	
Benzene	mg/L	ND	0.050	11/07/12 11:46	
Carbon tetrachloride	mg/L	ND	0.050	11/07/12 11:46	
Chlorobenzene	mg/L	ND	0.050	11/07/12 11:46	
Chloroform	mg/L	ND	0.050	11/07/12 11:46	
Tetrachloroethene	mg/L	ND	0.050	11/07/12 11:46	
Trichloroethene	mg/L	ND	0.050	11/07/12 11:46	
Vinyl chloride	mg/L	ND	0.020	11/07/12 11:46	
4-Bromofluorobenzene (S)	%.	103	72-125	11/07/12 11:46	
Dibromofluoromethane (S)	%.	94	83-123	11/07/12 11:46	
Toluene-d8 (S)	%.	97	81-114	11/07/12 11:46	

LABORATORY CONTROL SAMPLE: 826916

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	.5	0.46	91	75-145	
1,2-Dichloroethane	mg/L	.5	0.47	94	71-127	
2-Butanone (MEK)	mg/L	2.5	2.7	106	42-177	
Benzene	mg/L	.5	0.45	90	76-123	
Carbon tetrachloride	mg/L	.5	0.46	92	65-125	
Chlorobenzene	mg/L	.5	0.47	94	78-120	
Chloroform	mg/L	.5	0.47	93	73-122	
Tetrachloroethene	mg/L	.5	0.44	88	57-125	
Trichloroethene	mg/L	.5	0.45	91	77-122	
Vinyl chloride	mg/L	.5	0.43	87	61-146	
4-Bromofluorobenzene (S)	%.			95	72-125	
Dibromofluoromethane (S)	%.			98	83-123	
Toluene-d8 (S)	%.			100	81-114	

MATRIX SPIKE SAMPLE: 826917

Parameter	Units	5071669001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	ND	.5	0.48	95	54-152	
1,2-Dichloroethane	mg/L	ND	.5	0.48	96	42-139	
2-Butanone (MEK)	mg/L	ND	2.5	2.6	105	43-142	
Benzene	mg/L	ND	.5	0.48	95	52-134	
Carbon tetrachloride	mg/L	ND	.5	0.45	89	26-136	
Chlorobenzene	mg/L	ND	.5	0.51	102	33-136	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

MATRIX SPIKE SAMPLE: 826917

Parameter	Units	5071669001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloroform	mg/L	ND	.5	0.49	98	50-134	
Tetrachloroethene	mg/L	ND	.5	0.49	97	30-124	
Trichloroethene	mg/L	ND	.5	0.47	94	44-130	
Vinyl chloride	mg/L	ND	.5	0.46	93	45-159	
4-Bromofluorobenzene (S)	%.				94	72-125	
Dibromofluoromethane (S)	%.				98	83-123	
Toluene-d8 (S)	%.				101	81-114	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: OEXT/31193
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 5071669001

METHOD BLANK: 825733
Matrix: Water
Associated Lab Samples: 5071669001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	ND	0.10	11/06/12 02:51	
2,4,5-Trichlorophenol	mg/L	ND	0.50	11/06/12 02:51	
2,4,6-Trichlorophenol	mg/L	ND	0.10	11/06/12 02:51	
2,4-Dinitrotoluene	mg/L	ND	0.10	11/06/12 02:51	
2-Methylphenol(o-Cresol)	mg/L	ND	0.10	11/06/12 02:51	
3&4-Methylphenol(m&p Cresol)	mg/L	ND	0.20	11/06/12 02:51	
Hexachloro-1,3-butadiene	mg/L	ND	0.10	11/06/12 02:51	
Hexachlorobenzene	mg/L	ND	0.10	11/06/12 02:51	
Hexachloroethane	mg/L	ND	0.10	11/06/12 02:51	
Nitrobenzene	mg/L	ND	0.10	11/06/12 02:51	
Pentachlorophenol	mg/L	ND	0.50	11/06/12 02:51	
Pyridine	mg/L	ND	0.10	11/06/12 02:51	
2,4,6-Tribromophenol (S)	%.	81	32-124	11/06/12 02:51	
2-Fluorobiphenyl (S)	%.	63	34-106	11/06/12 02:51	
2-Fluorophenol (S)	%.	27	10-74	11/06/12 02:51	
Nitrobenzene-d5 (S)	%.	66	33-108	11/06/12 02:51	
p-Terphenyl-d14 (S)	%.	72	31-122	11/06/12 02:51	
Phenol-d5 (S)	%.	14	10-56	11/06/12 02:51	

LABORATORY CONTROL SAMPLE: 825734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	1	0.54	54	30-92	
2,4,5-Trichlorophenol	mg/L	1	0.73	73	39-125	
2,4,6-Trichlorophenol	mg/L	1	0.78	78	38-125	
2,4-Dinitrotoluene	mg/L	1	0.69	69	38-119	
2-Methylphenol(o-Cresol)	mg/L	1	0.58	58	31-106	
3&4-Methylphenol(m&p Cresol)	mg/L	2	1.0	51	24-97	
Hexachloro-1,3-butadiene	mg/L	1	0.54	54	16-115	
Hexachlorobenzene	mg/L	1	0.66	66	33-124	
Hexachloroethane	mg/L	1	0.49	49	16-100	
Nitrobenzene	mg/L	1	0.61	61	35-114	
Pentachlorophenol	mg/L	1	0.69	69	14-131	
Pyridine	mg/L	1	0.21	21	10-61	
2,4,6-Tribromophenol (S)	%.			82	32-124	
2-Fluorobiphenyl (S)	%.			63	34-106	
2-Fluorophenol (S)	%.			36	10-74	
Nitrobenzene-d5 (S)	%.			65	33-108	
p-Terphenyl-d14 (S)	%.			82	31-122	
Phenol-d5 (S)	%.			22	10-56	

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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

MATRIX SPIKE SAMPLE: 825735

Parameter	Units	5071669001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	ND	1	0.65	65	35-102	
2,4,5-Trichlorophenol	mg/L	ND	1	0.87	87	60-121	
2,4,6-Trichlorophenol	mg/L	ND	1	0.86	86	57-125	
2,4-Dinitrotoluene	mg/L	ND	1	0.77	77	37-114	
2-Methylphenol(o-Cresol)	mg/L	ND	1	0.61	61	41-111	
3&4-Methylphenol(m&p Cresol)	mg/L	ND	2	1.1	53	32-111	
Hexachloro-1,3-butadiene	mg/L	ND	1	0.63	63	20-114	
Hexachlorobenzene	mg/L	ND	1	0.76	76	32-125	
Hexachloroethane	mg/L	ND	1	0.58	58	22-101	
Nitrobenzene	mg/L	ND	1	0.75	75	50-113	
Pentachlorophenol	mg/L	ND	1	0.83	83	25-117	
Pyridine	mg/L	ND	1	0.13	13	10-112	
2,4,6-Tribromophenol (S)	%.				93	32-124	
2-Fluorobiphenyl (S)	%.				70	34-106	
2-Fluorophenol (S)	%.				40	10-74	
Nitrobenzene-d5 (S)	%.				80	33-108	
p-Terphenyl-d14 (S)	%.				88	31-122	
Phenol-d5 (S)	%.				24	10-56	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: PMST/7661 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 5071669001, 5071669002, 5071669003

SAMPLE DUPLICATE: 825385

Parameter	Units	5071650007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.4	9.2	1	5	

SAMPLE DUPLICATE: 825386

Parameter	Units	5071611001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	65.7	65.6	.07	5	

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QUALITY CONTROL DATA

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

QC Batch: WET/10411
QC Batch Method: EPA 9045
Analysis Method: EPA 9045
Analysis Description: 9045 pH
Associated Lab Samples: 5071669001

SAMPLE DUPLICATE: 826002

Parameter	Units	5071725001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.5	7.3	12	20	H3

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QUALIFIERS

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	RPD value was outside control limits due to non-homogeneity of the analyte in the sample matrix.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H3	Sample was received or analysis requested beyond the recognized method holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
N2	The lab does not hold TNI accreditation for this parameter.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.
R2	RPD value was outside control limits due to matrix interference

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: USEPA/Harris Thomas Forge
Pace Project No.: 5071669

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5071669001	**HTF-Bldg. D Pit 1**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071669002	**HTF-Bldg. D Pit 2**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071669003	**HTF Rolloff 1**	EPA 3050	MPRP/10137	EPA 6010	ICP/10569
5071669001	**HTF-Bldg. D Pit 1**	EPA 3010	MPRP/10146	EPA 6010	ICP/10571
5071669002	**HTF-Bldg. D Pit 2**	EPA 3010	MPRP/10146	EPA 6010	ICP/10571
5071669003	**HTF Rolloff 1**	EPA 3010	MPRP/10146	EPA 6010	ICP/10571
5071669001	**HTF-Bldg. D Pit 1**	EPA 7470	MERP/4238	EPA 7470	MERC/4277
5071669002	**HTF-Bldg. D Pit 2**	EPA 7470	MERP/4238	EPA 7470	MERC/4277
5071669003	**HTF Rolloff 1**	EPA 7470	MERP/4238	EPA 7470	MERC/4277
5071669001	**HTF-Bldg. D Pit 1**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071669002	**HTF-Bldg. D Pit 2**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071669003	**HTF Rolloff 1**	EPA 7471	MERP/4237	EPA 7471	MERC/4272
5071669001	**HTF-Bldg. D Pit 1**	EPA 3510	OEXT/31193	EPA 8270	MSSV/11290
5071669001	**HTF-Bldg. D Pit 1**	EPA 8260	MSV/47572		
5071669001	**HTF-Bldg. D Pit 1**	EPA 8260	MSV/47594		
5071669001	**HTF-Bldg. D Pit 1**	ASTM D2974-87	PMST/7661		
5071669002	**HTF-Bldg. D Pit 2**	ASTM D2974-87	PMST/7661		
5071669003	**HTF Rolloff 1**	ASTM D2974-87	PMST/7661		
5071669001	**HTF-Bldg. D Pit 1**	EPA 9045	WET/10411		

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Pace Analytical e-Report

Report prepared for:
PACE ANALYTICAL SERVICES, INC.
7726 MOLLER ROAD
INDIANAPOLIS, IN 46268
CONTACT: MICK MAYSE

Project ID: USEPA HARRIS TONAS FORGE
Sampling Date(s): November 01, 2012
Lab Report ID: 12110055
Client Service Contact: James Wickham (518) 346-4592

Analysis Included:
SVOCs by GCMS

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is respondsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Dan Pfalzer
Laboratory Director

Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), NC (668)

Pace Analytical Services, Inc.| 2190 Technology Drive | Schenectady, NY 12308
Phone: 518.346.4592 | internet: www.pacelabs.com

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Table of Contents

Section 1: CASE NARRATIVE 4

Section 2: QUALIFIERS 6

Section 3: SAMPLE CHAIN OF CUSTODY 8

Section 4: GC/MS Semivolatiles 10

Section 5: Quality Control Samples (Lab) 13

CASE NARRATIVE

November 07, 2012

CASE NARRATIVE

This data package (SDG ID: 12110055) consists of 1 solid sample received on 11/3/2012. The sample is from Project Name: USEPA HARRIS TONAS FORGE.

This sample delivery group consists of the following samples:

1

Lab Sample ID	Client ID	Collection Date
AP35329	HTF-BLDG. D PIT 1	11/1/2012 13:40

Sample Delivery and Receipt Conditions

(1.) All samples were delivered to the laboratory via FEDEX delivery service on 11/3/2012.

(2.) All samples were received at the laboratory intact and within holding times.

(3.) The following cooler temperature was recorded at sample receipt (Control limits are between 0-6 Degrees Celsius): 0.9 degrees Celsius. Please see Chain of Custody for details.

Semivolatile Organics Analysis

Analysis for Semivolatile Organics was performed by method SW-846 8270C. Samples were extracted by Accelerated Solvent Extraction (EPA Method 3545). The following technical and administrative items were noted for the analysis:

(1.) Sample (LAB ID: AP35329) was diluted and re-analyzed due to matrix causing internal standard failure. Elevated reporting limits are provided.

(2.) The percent recovery for Acenaphthene and 4-nitrophenol exceeded method established limits for the associated Laboratory Control Spike sample (LAB ID: AP35329L). Low analytical bias may be indicated for the associated samples (AP35329).

Respectfully submitted,

James T. Wickham
Client Services Manager

S:\Lims Data\1211\12110055\Package\CN_12110055_Rev00.doc

QUALIFIERS

Organic Laboratory Qualifiers Defined

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).

P - Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.

U - Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.

Z - Chromatographic interference due to PCB co-elution.

* - Value not within control limits.

Inorganic Laboratory Qualifiers Defined

B - Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).

U - Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY

Chain of Custody

<12110055P1>

121100551

Pace Analytical®
www.pacelabs.com

Pace New York
2190 Technology Drive
Schenectady, NY 12308

Workorder: 5071669 **Workorder Name:** USEPA/Harris Thomas Forge **Results Requested** 11/7/2012

Report / Invoice To

Mick Mayse
Pace Analytical Indianapolis
7726 Moller Road
Indianapolis, IN 46268
Phone (317)875-5894
Email: mick.mayse@pacelabs.com

Subcontract To

P.O.

Requested Analysis

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpres.						8270 Semi-volatiles												LAB USE ONLY
1	HTF-Bldg. D Pit 1	11/1/2012 13:40	5071669001	Solid	X						X												AP35329
2																							
3																							
4																							
5																							

Transfers	Released By	Date/Time	Received By	Date/Time
1	Marcia Bennett	11/2/12 17:05	11/3/12 VIA FED EX →	
2	VIA FED EX →		Andrea Bittig (PACE)	11/3/12 10:27
3				

Comments

Totals. Pls. report in mg/kg.
Rush for Wed. 11/7/12.
Thanks!

Cooler Temperature on Receipt 0.9 °C **Custody Seal** Y or N **Received on Ice** Y or N **Samples Intact** Y or N

GC/MS Semivolatiles

4

Analytical Sample Results

Job Number: 12110055

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: PACE ANALYTICAL SERVICES, INC.
Project: USEPA HARRIS TONAS FORGE
Client Sample ID: HTF-BLDG. D PIT 1
Lab Sample ID: 12110055-01 (AP35329)

Collection Date: 11/01/2012 13:40
Sample Matrix: SOLID
Received Date: 11/03/2012 10:27
Percent Solid: 98.2 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS07-1126-5	EPA Method 8270C	11/06/2012 09:47	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Analysis 2:	MS07-1126-9	EPA Method 8270C	11/06/2012 15:30	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20720	EPA 3545	11/05/2012 14:20	JWO	30.0 g	1.00 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
2,4,5-Trichlorophenol	95-95-4	ND	0.679	2.00	U	MS07-1126-5
2,4,6-Trichlorophenol	88-06-2	ND	0.679	2.00	U	MS07-1126-5
2,4-Dichlorophenol	120-83-2	ND	0.679	2.00	U	MS07-1126-5
2,4-Dimethylphenol	105-67-9	ND	0.679	2.00	U	MS07-1126-5
2,4-Dinitrophenol	51-28-5	ND	0.679	2.00	U	MS07-1126-5
2,4-Dinitrotoluene	121-14-2	ND	0.679	2.00	U	MS07-1126-5
2,6-Dinitrotoluene	606-20-2	ND	0.679	2.00	U	MS07-1126-5
2-Chloronaphthalene	91-58-7	ND	0.339	2.00	U	MS07-1126-5
2-Chlorophenol	95-57-8	ND	0.679	2.00	U	MS07-1126-5
2-Methylnaphthalene	91-57-6	ND	0.339	2.00	U	MS07-1126-5
2-Methylphenol	95-48-7	ND	0.679	2.00	U	MS07-1126-5
2-Nitroaniline	88-74-4	ND	0.679	2.00	U	MS07-1126-5
2-Nitrophenol	88-75-5	ND	0.679	2.00	U	MS07-1126-5
3&4-Methylphenol*	108-39-4/106-44-5	ND	0.679	2.00	U	MS07-1126-5
3,3'-Dichlorobenzidine	91-94-1	ND	0.679	2.00	U	MS07-1126-5
3-Nitroaniline	99-09-2	ND	0.679	2.00	U	MS07-1126-5
4,6-Dinitro-2-methylphenol	534-52-1	ND	0.679	2.00	U	MS07-1126-5
4-Bromophenyl-phenylether	101-55-3	ND	0.679	2.00	U	MS07-1126-5
4-Chloro-3-methylphenol	59-50-7	ND	0.679	2.00	U	MS07-1126-5
4-Chloroaniline	106-47-8	ND	0.679	2.00	U	MS07-1126-5
4-Chlorophenyl-phenylether	7005-72-3	ND	0.679	2.00	U	MS07-1126-5
4-Nitroaniline	100-01-6	ND	0.679	2.00	U	MS07-1126-5
4-Nitrophenol	100-02-7	ND	0.679	2.00	U	MS07-1126-5
Acenaphthene	83-32-9	ND	0.339	2.00	U	MS07-1126-5
Acenaphthylene	208-96-8	ND	0.339	2.00	U	MS07-1126-5
Anthracene	120-12-7	ND	0.339	2.00	U	MS07-1126-5
Benzo(a)anthracene	56-55-3	ND	0.339	2.00	U	MS07-1126-5
Benzo(a)pyrene	50-32-8	ND	0.339	2.00	U	MS07-1126-5
Benzo(b)fluoranthene	205-99-2	ND	1.70	10.0	U	MS07-1126-9
Benzo(g,h,i)perylene	191-24-2	ND	1.70	10.0	U	MS07-1126-9
Benzo(k)fluoranthene	207-08-9	ND	1.70	10.0	U	MS07-1126-9
bis(2-chloroethoxy)methane	111-91-1	ND	0.679	2.00	U	MS07-1126-5
bis(2-chloroethyl)ether	111-44-4	ND	0.679	2.00	U	MS07-1126-5
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.679	2.00	U	MS07-1126-5
bis(2-Ethylhexyl)phthalate	117-81-7	**2.49**	0.679	2.00		MS07-1126-5
Butylbenzylphthalate	85-68-7	ND	0.679	2.00	U	MS07-1126-5
Chrysene	218-01-9	ND	0.339	2.00	U	MS07-1126-5
Dibenz(a,h)anthracene	53-70-3	ND	1.70	10.0	U	MS07-1126-9
Dibenzofuran	132-64-9	ND	0.339	2.00	U	MS07-1126-5
Diethylphthalate	84-66-2	ND	0.679	2.00	U	MS07-1126-5
Dimethylphthalate	131-11-3	ND	0.679	2.00	U	MS07-1126-5
Di-n-butylphthalate	84-74-2	ND	0.679	2.00	U	MS07-1126-5
Di-n-octylphthalate	117-84-0	ND	3.39	10.0	U	MS07-1126-9
Fluoranthene	206-44-0	ND	0.339	2.00	U	MS07-1126-5
Fluorene	86-73-7	ND	0.339	2.00	U	MS07-1126-5
Hexachlorobenzene	118-74-1	ND	0.679	2.00	U	MS07-1126-5

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Analytical Sample Results

Job Number: 12110055

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: PACE ANALYTICAL SERVICES, INC.
Project: USEPA HARRIS TONAS FORGE
Client Sample ID: HTF-BLDG. D PIT 1
Lab Sample ID: 12110055-01 (AP35329)

Collection Date: 11/01/2012 13:40
Sample Matrix: SOLID
Received Date: 11/03/2012 10:27
Percent Solid: 98.2 - Results are based on dry weight unless otherwise noted.

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS07-1126-5	EPA Method 8270C	11/06/2012 09:47	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Analysis 2:	MS07-1126-9	EPA Method 8270C	11/06/2012 15:30	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20720	EPA 3545	11/05/2012 14:20	JWO	30.0 g	1.00 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Hexachlorobutadiene	87-68-3	ND	0.679	2.00	U	MS07-1126-5
Hexachlorocyclopentadiene	77-47-4	ND	0.679	2.00	U	MS07-1126-5
Hexachloroethane	67-72-1	ND	0.679	2.00	U	MS07-1126-5
Indeno(1,2,3-cd)pyrene	193-39-5	ND	1.70	10.0	U	MS07-1126-9
Isophorone	78-59-1	ND	0.679	2.00	U	MS07-1126-5
Naphthalene	91-20-3	ND	0.339	2.00	U	MS07-1126-5
Nitrobenzene	98-95-3	ND	0.679	2.00	U	MS07-1126-5
N-Nitroso-di-n-propylamine	621-64-7	ND	0.679	2.00	U	MS07-1126-5
N-Nitrosodiphenylamine	86-30-6	ND	0.679	2.00	U	MS07-1126-5
Pentachlorophenol	87-86-5	ND	0.679	2.00	U	MS07-1126-5
Phenanthrene	85-01-8	ND	0.339	2.00	U	MS07-1126-5
Phenol	108-95-2	ND	0.679	2.00	U	MS07-1126-5
Pyrene	129-00-0	ND	0.339	2.00	U	MS07-1126-5

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	74.4	19.0-122		MS07-1126-5
2-Fluorobiphenyl	321-60-8	48.2	30.0-115		MS07-1126-5
2-Fluorophenol	367-12-4	52.6	25.0-121		MS07-1126-5
Terphenyl-d14	1718-51-0	33.6	18.0-137		MS07-1126-5
Nitrobenzene-d5	4165-60-0	48.1	23.0-120		MS07-1126-5
Phenol-d6	13127-88-3	64.8	24.0-113		MS07-1126-5

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

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Quality Control Samples (Lab)

5

Quality Control Results
Method Blank

Job Number: 12110055

Pace Analytical Services, Inc.
2190 Technology Drive
Schenectady, NY 12308
Phone: 518.346.4592
Fax: 518.381.6055

Client: PACE ANALYTICAL SERVICES, INC.
Project: USEPA HARRIS TONAS FORGE
Client Sample ID: Method Blank (AP35329B)
Lab Sample ID: SBLK-59

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS07-1126-3	EPA Method 8270C	11/06/2012 09:04	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20720	EPA 3545	11/05/2012 14:15	JWO	30.4 g	1.00 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
2,4,5-Trichlorophenol	95-95-4	ND	0.329	1.00	U	MS07-1126-3
2,4,6-Trichlorophenol	88-06-2	ND	0.329	1.00	U	MS07-1126-3
2,4-Dichlorophenol	120-83-2	ND	0.329	1.00	U	MS07-1126-3
2,4-Dimethylphenol	105-67-9	ND	0.329	1.00	U	MS07-1126-3
2,4-Dinitrophenol	51-28-5	ND	0.329	1.00	U	MS07-1126-3
2,4-Dinitrotoluene	121-14-2	ND	0.329	1.00	U	MS07-1126-3
2,6-Dinitrotoluene	606-20-2	ND	0.329	1.00	U	MS07-1126-3
2-Chloronaphthalene	91-58-7	ND	0.164	1.00	U	MS07-1126-3
2-Chlorophenol	95-57-8	ND	0.329	1.00	U	MS07-1126-3
2-Methylnaphthalene	91-57-6	ND	0.164	1.00	U	MS07-1126-3
2-Methylphenol	95-48-7	ND	0.329	1.00	U	MS07-1126-3
2-Nitroaniline	88-74-4	ND	0.329	1.00	U	MS07-1126-3
2-Nitrophenol	88-75-5	ND	0.329	1.00	U	MS07-1126-3
3&4-Methylphenol*	108-39-4/106-44-5	ND	0.329	1.00	U	MS07-1126-3
3,3'-Dichlorobenzidine	91-94-1	ND	0.329	1.00	U	MS07-1126-3
3-Nitroaniline	99-09-2	ND	0.329	1.00	U	MS07-1126-3
4,6-Dinitro-2-methylphenol	534-52-1	ND	0.329	1.00	U	MS07-1126-3
4-Bromophenyl-phenylether	101-55-3	ND	0.329	1.00	U	MS07-1126-3
4-Chloro-3-methylphenol	59-50-7	ND	0.329	1.00	U	MS07-1126-3
4-Chloroaniline	106-47-8	ND	0.329	1.00	U	MS07-1126-3
4-Chlorophenyl-phenylether	7005-72-3	ND	0.329	1.00	U	MS07-1126-3
4-Nitroaniline	100-01-6	ND	0.329	1.00	U	MS07-1126-3
4-Nitrophenol	100-02-7	ND	0.329	1.00	U	MS07-1126-3
Acenaphthene	83-32-9	ND	0.164	1.00	U	MS07-1126-3
Acenaphthylene	208-96-8	ND	0.164	1.00	U	MS07-1126-3
Anthracene	120-12-7	ND	0.164	1.00	U	MS07-1126-3
Benzo(a)anthracene	56-55-3	ND	0.164	1.00	U	MS07-1126-3
Benzo(a)pyrene	50-32-8	ND	0.164	1.00	U	MS07-1126-3
Benzo(b)fluoranthene	205-99-2	ND	0.164	1.00	U	MS07-1126-3
Benzo(g,h,i)perylene	191-24-2	ND	0.164	1.00	U	MS07-1126-3
Benzo(k)fluoranthene	207-08-9	ND	0.164	1.00	U	MS07-1126-3
bis(2-chloroethoxy)methane	111-91-1	ND	0.329	1.00	U	MS07-1126-3
bis(2-chloroethyl)ether	111-44-4	ND	0.329	1.00	U	MS07-1126-3
bis(2-Chloroisopropyl)ether	108-60-1	ND	0.329	1.00	U	MS07-1126-3
bis(2-Ethylhexyl)phthalate	117-81-7	ND	0.329	1.00	U	MS07-1126-3
Butylbenzylphthalate	85-68-7	ND	0.329	1.00	U	MS07-1126-3
Chrysene	218-01-9	ND	0.164	1.00	U	MS07-1126-3
Dibenz(a,h)anthracene	53-70-3	ND	0.164	1.00	U	MS07-1126-3
Dibenzofuran	132-64-9	ND	0.164	1.00	U	MS07-1126-3
Diethylphthalate	84-66-2	ND	0.329	1.00	U	MS07-1126-3
Dimethylphthalate	131-11-3	ND	0.329	1.00	U	MS07-1126-3
Di-n-butylphthalate	84-74-2	ND	0.329	1.00	U	MS07-1126-3
Di-n-octylphthalate	117-84-0	ND	0.329	1.00	U	MS07-1126-3
Fluoranthene	206-44-0	ND	0.164	1.00	U	MS07-1126-3
Fluorene	86-73-7	ND	0.164	1.00	U	MS07-1126-3
Hexachlorobenzene	118-74-1	ND	0.329	1.00	U	MS07-1126-3
Hexachlorobutadiene	87-68-3	ND	0.329	1.00	U	MS07-1126-3

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Quality Control Results
Method Blank

Job Number: 12110055

Client: PACE ANALYTICAL SERVICES, INC.
Project: USEPA HARRIS TONAS FORGE
Client Sample ID: Method Blank (AP35329B)
Lab Sample ID: SBLK-59

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS07-1126-3	EPA Method 8270C	11/06/2012 09:04	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20720	EPA 3545	11/05/2012 14:15	JWO	30.4 g	1.00 mL	NA

Analyte	CAS No.	Result (mg/kg)	PQL	Dilution Factor	Flags	File ID
Hexachlorocyclopentadiene	77-47-4	ND	0.329	1.00	U	MS07-1126-3
Hexachloroethane	67-72-1	ND	0.329	1.00	U	MS07-1126-3
Indeno(1,2,3-cd)pyrene	193-39-5	ND	0.164	1.00	U	MS07-1126-3
Isophorone	78-59-1	ND	0.329	1.00	U	MS07-1126-3
Naphthalene	91-20-3	ND	0.164	1.00	U	MS07-1126-3
Nitrobenzene	98-95-3	ND	0.329	1.00	U	MS07-1126-3
N-Nitroso-di-n-propylamine	621-64-7	ND	0.329	1.00	U	MS07-1126-3
N-Nitrosodiphenylamine	86-30-6	ND	0.329	1.00	U	MS07-1126-3
Pentachlorophenol	87-86-5	ND	0.329	1.00	U	MS07-1126-3
Phenanthrene	85-01-8	ND	0.164	1.00	U	MS07-1126-3
Phenol	108-95-2	ND	0.329	1.00	U	MS07-1126-3
Pyrene	129-00-0	ND	0.164	1.00	U	MS07-1126-3

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	138	19.0-122	*	MS07-1126-3
2-Fluorobiphenyl	321-60-8	98.4	30.0-115		MS07-1126-3
2-Fluorophenol	367-12-4	58.6	25.0-121		MS07-1126-3
Terphenyl-d14	1718-51-0	98.9	18.0-137		MS07-1126-3
Nitrobenzene-d5	4165-60-0	92.9	23.0-120		MS07-1126-3
Phenol-d6	13127-88-3	101	24.0-113		MS07-1126-3

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

5

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Quality Control Results
Lab Control Sample
Job Number: 12110055

Pace Analytical Services, Inc.
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Schenectady, NY 12308
Phone: 518.346.4592
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Client: PACE ANALYTICAL SERVICES, INC.
Project: USEPA HARRIS TONAS FORGE
Client Sample ID: Lab Control Sample (AP35329L)
Lab Sample ID: LCS-59

Collection Date: N/A
Sample Matrix: SOLID
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS07-1126-4	EPA Method 8270C	11/06/2012 09:25	RMS	NA	NA	Varian, VF-5MS,30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20720	EPA 3545	11/05/2012 14:16	JWO	30.1 g	1.00 mL	NA

Analyte Spiked	CAS No.	Added (mg/kg)	LCS (mg/kg)	LCS % Rec.	Q[1]	Limits (%)
2-Chlorophenol	95-57-8	3.32	2.83	85.3		25.0-130
4-Chloro-3-methylphenol	59-50-7	3.32	3.00	90.3		46.0-112
4-Nitrophenol	100-02-7	3.32	4.43	133	*	22.0-123
Acenaphthene	83-32-9	3.32	4.07	123	*	33.0-117
Acenaphthylene	208-96-8	3.32	3.50	105		36.0-112
Anthracene	120-12-7	3.32	3.42	103		33.0-125
Benzo(a)anthracene	56-55-3	3.32	3.33	100		41.0-127
Benzo(a)pyrene	50-32-8	3.32	3.80	114		27.0-127
Benzo(b)fluoranthene	205-99-2	3.32	3.47	104		36.0-126
Benzo(g,h,i)perylene	191-24-2	3.32	3.23	97.4		25.0-120
Benzo(k)fluoranthene	207-08-9	3.32	3.82	115		44.0-125
Chrysene	218-01-9	3.32	3.59	108		41.0-123
Dibenz(a,h)anthracene	53-70-3	3.32	3.24	97.4		35.0-118
Fluoranthene	206-44-0	3.32	3.51	106		33.0-118
Fluorene	86-73-7	3.32	2.92	87.9		29.0-120
Indeno(1,2,3-cd)pyrene	193-39-5	3.32	3.51	106		35.0-113
Naphthalene	91-20-3	3.32	2.81	84.7		24.0-119
Pentachlorophenol	87-86-5	3.32	1.85	55.8		4.00-113
Phenanthrene	85-01-8	3.32	3.15	94.8		41.0-118
Phenol	108-95-2	3.32	2.89	87.2		35.0-128
Pyrene	129-00-0	3.32	3.36	101		42.0-122

[1]Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

Surrogate	CAS No.	% Recovery	Limits (%)	Q[1]	File ID
2,4,6-Tribromophenol	118-79-6	124	19.0-122	*	MS07-1126-4
2-Fluorobiphenyl	321-60-8	97.5	30.0-115		MS07-1126-4
2-Fluorophenol	367-12-4	81.2	25.0-121		MS07-1126-4
Terphenyl-d14	1718-51-0	125	18.0-137		MS07-1126-4
Nitrobenzene-d5	4165-60-0	98.9	23.0-120		MS07-1126-4
Phenol-d6	13127-88-3	110	24.0-113		MS07-1126-4

[1]Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
*3&4-Methylphenol is reported as a co-elution of 3-Methylphenol and 4-Methylphenol. 3-Methylphenol was not a calibration component in the initial calibration curve.

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