TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Job ID: 240-27737-1
Client Project/Site: Satralloy - Pile Sampling

For:
Golder Associates Inc.
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Attn: Mr. Bob Ireson

Authorized for release by:
8/30/2013 3:02:51 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Golder Associates Inc.

Project: Satralloy - Pile Sampling

Report Number: 240-27737-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/08/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 2.0, 20.2, 20.8, 21.2, 21.8, 22.7 and 24.0 C.

INCREMENTAL SAMPLING METHOD (ISM)

Solid samples were processed by incremental methodology prior to prep and analyses. Per client instructions, samples were dried, disaggregated, and sieved using a #10, 2mm sieve. Material that did not pass through the sieve was then milled using a jaw-style crusher. After milling, material was again sieved using a #10, 2mm sieve. All material of less than 2mm in size was subsampled using a 2D-slabcake technique. Material of greater than 2mm in size, that material which did not pass through the sieve, was retained for archiving.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples SP-01-ISM-01 (240-27737-1), SP-02-ISM-01 (240-27737-2), SP-03-ISM-01 (240-27737-3), SP-04-ISM-01 (240-27737-4), SP-05-ISM-01 (240-27737-5) and SP-06-ISM-01 (240-27737-6) were analyzed for semivolatile organic compounds (GCMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8270C. The samples began the drying process on 08/08/2013, were prepared on 08/19/2013 and 08/20/2013 and analyzed on 08/21/2013, 08/22/2013 and 08/23/2013.

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Laboratory: TestAmerica Canton (Continued)

Bis(2-ethylhexyl) phthalate and Di-n-butyl phthalate were detected in method blank MB 240-98019/13-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Di-n-butyl phthalate was detected in method blank MB 240-98217/6-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Benzaldehyde failed the recovery criteria low for LCS 240-98019/14-A. Refer to the QC report for details.

The laboratory control sample (LCS) for prep batch 98019, associated with sample SP-01-ISM-01 (240-27737-1), had a recovery for benzaldehyde below acceptance criteria. This compound is not a control analyte; therefore, no corrective action was required.

Samples SP-01-ISM-01 (240-27737-1)[6.67X], SP-02-ISM-01 (240-27737-2)[2.5X] and SP-03-ISM-01 (240-27737-3)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample was diluted due to the nature of the sample matrix: SP-01-ISM-01 (240-27737-1). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample SP-EB-ISM-01 (240-27737-7) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 08/13/2013 and analyzed on 08/15/2013.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-97238/16-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) WITH INCREMENTAL SAMPLE PREPARATION

Samples SP-01-ISM-01 (240-27737-1), SP-02-ISM-01 (240-27737-2), SP-03-ISM-01 (240-27737-3), SP-04-ISM-01 (240-27737-4), SP-05-ISM-01 (240-27737-5) and SP-06-ISM-01 (240-27737-6) were analyzed for polychlorinated biphenyls (PCBs) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8082. The samples began the drying process on 08/08/2013, were prepared on 08/19/2013 and 08/20/2013 and analyzed on 08/21/2013 and 08/22/2013.

Tetrachloro-m-xylene failed the surrogate recovery criteria high for SP-02-ISM-01 (240-27737-2). Tetrachloro-m-xylene failed the surrogate recovery criteria high for LCS 240-98018/17-A. Refer to the QC report for details.

Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample(s) contained an allowable number of surrogate compounds outside limits: (LCS 240-98018/17-A). These results have been reported and qualified.

The opening continuing calibration verification (CCV) associated with batch 98456 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following sample(s) required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SP-01-ISM-01 (240-27737-1), SP-03-ISM-01 (240-27737-3), SP-04-ISM-01 (240-27737-4), SP-05-ISM-01 (240-27737-5), SP-06-ISM-01 (240-27737-6). Lot S65830.

Samples SP-01-ISM-01 (240-27737-1)[5X] and SP-02-ISM-01 (240-27737-2)[10X] required dilution prior to analysis. The reporting limits

Job ID: 240-27737-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

have been adjusted accordingly.

The following sample(s) was diluted due to the nature of the sample matrix: SP-01-ISM-01 (240-27737-1), SP-02-ISM-01 (240-27737-2). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

METALS (ICP) WITH INCREMENTAL SAMPLE PREPARATION

Samples SP-01-ISM-01 (240-27737-1), SP-02-ISM-01 (240-27737-2), SP-03-ISM-01 (240-27737-3), SP-04-ISM-01 (240-27737-4), SP-05-ISM-01 (240-27737-5) and SP-06-ISM-01 (240-27737-6) were analyzed for metals (ICP) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6010B. The samples were leached on 08/08/2013, prepared on 08/21/2013 and analyzed on 08/22/2013.

Barium was detected in method blank LB 240-98259/1-D at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Barium was detected in method blank MB 240-98344/2-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample SP-01-ISM-01 (240-27737-1)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) was diluted due to the nature of the sample matrix: SP-01-ISM-01 (240-27737-1). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)

Sample SP-EB-ISM-01 (240-27737-7) was analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 08/14/2013 and analyzed on 08/15/2013.

Barium was detected in method blank MB 240-97357/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples SP-01-ISM-01 (240-27737-1), SP-02-ISM-01 (240-27737-2), SP-03-ISM-01 (240-27737-3), SP-04-ISM-01 (240-27737-4), SP-05-ISM-01 (240-27737-5) and SP-06-ISM-01 (240-27737-6) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 7470A. The samples were leached on 08/08/2013, prepared on 08/21/2013 and analyzed on 08/22/2013.

No other difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Sample SP-EB-ISM-01 (240-27737-7) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/14/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples SP-01-ISM-01 (240-27737-1), SP-02-ISM-01 (240-27737-2), SP-03-ISM-01 (240-27737-3), SP-04-ISM-01 (240-27737-4), SP-05-ISM-01 (240-27737-5) and SP-06-ISM-01 (240-27737-6) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/21/2013.

Job ID: 240-27737-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

Method Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-27737-1	SP-01-ISM-01	Solid	08/05/13 15:20	08/08/13 09:00
240-27737-2	SP-02-ISM-01	Solid	08/06/13 10:10	08/08/13 09:00
240-27737-3	SP-03-ISM-01	Solid	08/06/13 15:17	08/08/13 09:00
240-27737-4	SP-04-ISM-01	Solid	08/06/13 16:54	08/08/13 09:00
240-27737-5	SP-05-ISM-01	Solid	08/07/13 10:40	08/08/13 09:00
240-27737-6	SP-06-ISM-01	Solid	08/07/13 11:45	08/08/13 09:00
240-27737-7	SP-EB-ISM-01	Water	08/06/13 10:13	08/08/13 09:00

Detection Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-01-ISM-01 — Lab Sample ID: 240-27737-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	410		44	3.3	ug/Kg	6.667	☼	8270C	Total/NA
Acenaphthene	83		44	5.0	ug/Kg	6.667	☼	8270C	Total/NA
Acenaphthylene	110		44	2.3	ug/Kg	6.667	☼	8270C	Total/NA
Acetophenone	75	J	660	61	ug/Kg	6.667	☼	8270C	Total/NA
Anthracene	330		44	5.2	ug/Kg	6.667	☼	8270C	Total/NA
Benzo[a]anthracene	1800		44	4.2	ug/Kg	6.667	☼	8270C	Total/NA
Benzo[a]pyrene	2000		44	4.2	ug/Kg	6.667	☼	8270C	Total/NA
Benzo[b]fluoranthene	2600		44	3.9	ug/Kg	6.667	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1300		44	2.3	ug/Kg	6.667	☼	8270C	Total/NA
Benzo[k]fluoranthene	850		44	4.5	ug/Kg	6.667	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	200	J B	460	130	ug/Kg	6.667	☼	8270C	Total/NA
Chrysene	1900		44	7.3	ug/Kg	6.667	☼	8270C	Total/NA
Dibenz(a,h)anthracene	330		44	4.4	ug/Kg	6.667	☼	8270C	Total/NA
Dibenzofuran	140	J	330	4.4	ug/Kg	6.667	☼	8270C	Total/NA
Fluoranthene	3500		44	3.6	ug/Kg	6.667	☼	8270C	Total/NA
Fluorene	87		44	3.5	ug/Kg	6.667	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1200		44	2.3	ug/Kg	6.667	☼	8270C	Total/NA
Naphthalene	300		44	5.4	ug/Kg	6.667	☼	8270C	Total/NA
Phenanthrene	1300		44	4.8	ug/Kg	6.667	☼	8270C	Total/NA
Pyrene	3100		44	2.9	ug/Kg	6.667	☼	8270C	Total/NA
Barium	0.34	J B	10	0.00067	mg/L	1		6010B	Total/NA
Chromium	0.0089	J	0.50	0.0022	mg/L	1		6010B	Total/NA
Selenium	0.012	J	0.50	0.0082	mg/L	2		6010B	Total/NA

Client Sample ID: SP-02-ISM-01 — Lab Sample ID: 240-27737-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	25	J	51	3.6	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	62		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	260		6.8	0.78	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	8.6		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Acetophenone	27	J	100	9.4	ug/Kg	1	☼	8270C	Total/NA
Anthracene	660		6.8	0.80	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	1200		6.8	0.64	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	970		6.8	0.65	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	1700	E	6.8	0.60	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	600		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	460		6.8	0.69	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	76		71	19	ug/Kg	1	☼	8270C	Total/NA
Caprolactam	39	J	340	38	ug/Kg	1	☼	8270C	Total/NA
Carbazole	370		51	28	ug/Kg	1	☼	8270C	Total/NA
Chrysene	1600		6.8	1.1	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	150		6.8	0.67	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	150		51	0.67	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	40	J B	71	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	2800	E	6.8	0.56	ug/Kg	1	☼	8270C	Total/NA
Fluorene	210		6.8	0.54	ug/Kg	1	☼	8270C	Total/NA
Hexachlorobenzene	18		6.8	2.1	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	500		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	130		6.8	0.84	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-02-ISM-01 (Continued) — Lab Sample ID: 240-27737-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	17	J	51	7.5	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	2500	E	6.8	0.75	ug/Kg	1	☼	8270C	Total/NA
Pyrene	2600	E	6.8	0.45	ug/Kg	1	☼	8270C	Total/NA
1,1'-Biphenyl - RA	26	J	130	8.9	ug/Kg	2.5	☼	8270C	Total/NA
2-Methylnaphthalene - RA	67		17	1.3	ug/Kg	2.5	☼	8270C	Total/NA
Acenaphthene - RA	260		17	1.9	ug/Kg	2.5	☼	8270C	Total/NA
Acenaphthylene - RA	8.7	J	17	0.89	ug/Kg	2.5	☼	8270C	Total/NA
Acetophenone - RA	26	J	260	23	ug/Kg	2.5	☼	8270C	Total/NA
Anthracene - RA	630		17	2.0	ug/Kg	2.5	☼	8270C	Total/NA
Benzaldehyde - RA	32	J	260	31	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]anthracene - RA	1200		17	1.6	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]pyrene - RA	900		17	1.6	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[b]fluoranthene - RA	1600		17	1.5	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[g,h,i]perylene - RA	590		17	0.89	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[k]fluoranthene - RA	380		17	1.7	ug/Kg	2.5	☼	8270C	Total/NA
Carbazole - RA	350		130	69	ug/Kg	2.5	☼	8270C	Total/NA
Chrysene - RA	1500		17	2.8	ug/Kg	2.5	☼	8270C	Total/NA
Dibenz(a,h)anthracene - RA	130		17	1.7	ug/Kg	2.5	☼	8270C	Total/NA
Dibenzofuran - RA	150		130	1.7	ug/Kg	2.5	☼	8270C	Total/NA
Di-n-butyl phthalate - RA	41	J B	180	38	ug/Kg	2.5	☼	8270C	Total/NA
Fluoranthene - RA	3000		17	1.4	ug/Kg	2.5	☼	8270C	Total/NA
Fluorene - RA	210		17	1.4	ug/Kg	2.5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene - RA	460		17	0.89	ug/Kg	2.5	☼	8270C	Total/NA
Naphthalene - RA	130		17	2.1	ug/Kg	2.5	☼	8270C	Total/NA
Phenanthrene - RA	2500		17	1.9	ug/Kg	2.5	☼	8270C	Total/NA
Pyrene - RA	2600		17	1.1	ug/Kg	2.5	☼	8270C	Total/NA
Arsenic	0.0063	J	0.50	0.0032	mg/L	1		6010B	Total/NA
Barium	0.34	J B	10	0.00067	mg/L	1		6010B	Total/NA
Cadmium	0.0087	J	0.10	0.00066	mg/L	1		6010B	Total/NA
Chromium	0.063	J	0.50	0.0022	mg/L	1		6010B	Total/NA
Lead	0.15	J	0.50	0.0019	mg/L	1		6010B	Total/NA
Selenium	0.0058	J	0.25	0.0041	mg/L	1		6010B	Total/NA

Client Sample ID: SP-03-ISM-01 — Lab Sample ID: 240-27737-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	35	J	51	3.6	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	330		6.9	0.51	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	210		6.9	0.78	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	21		6.9	0.36	ug/Kg	1	☼	8270C	Total/NA
Acetophenone	35	J	100	9.5	ug/Kg	1	☼	8270C	Total/NA
Anthracene	690		6.9	0.80	ug/Kg	1	☼	8270C	Total/NA
Benzaldehyde	69	J	100	12	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	1800	E	6.9	0.65	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	850		6.9	0.66	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	2000	E	6.9	0.61	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	400		6.9	0.36	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	460		6.9	0.70	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	78		72	20	ug/Kg	1	☼	8270C	Total/NA
Caprolactam	43	J	340	38	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-03-ISM-01 (Continued) — Lab Sample ID: 240-27737-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbazole	450		51	28	ug/Kg	1	☼	8270C	Total/NA
Chrysene	2500	E	6.9	1.1	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	99		6.9	0.68	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	190		51	0.68	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	83	B	72	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	3800	E	6.9	0.57	ug/Kg	1	☼	8270C	Total/NA
Fluorene	130		6.9	0.54	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	320		6.9	0.36	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	400		6.9	0.84	ug/Kg	1	☼	8270C	Total/NA
Phenol	39	J	51	7.5	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	3000	E	6.9	0.75	ug/Kg	1	☼	8270C	Total/NA
Pyrene	3400	E	6.9	0.45	ug/Kg	1	☼	8270C	Total/NA
1,4-Dichlorobenzene	21	J	51	21	ug/Kg	1	☼	8270C	Total/NA
1,1'-Biphenyl - RA	33	J	210	14	ug/Kg	4	☼	8270C	Total/NA
2-Methylnaphthalene - RA	300		27	2.1	ug/Kg	4	☼	8270C	Total/NA
Acenaphthene - RA	210		27	3.1	ug/Kg	4	☼	8270C	Total/NA
Acenaphthylene - RA	20	J	27	1.4	ug/Kg	4	☼	8270C	Total/NA
Acetophenone - RA	40	J	410	38	ug/Kg	4	☼	8270C	Total/NA
Anthracene - RA	640		27	3.2	ug/Kg	4	☼	8270C	Total/NA
Benzaldehyde - RA	66	J	410	49	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]anthracene - RA	1500		27	2.6	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]pyrene - RA	790		27	2.6	ug/Kg	4	☼	8270C	Total/NA
Benzo[b]fluoranthene - RA	1700		27	2.4	ug/Kg	4	☼	8270C	Total/NA
Benzo[g,h,i]perylene - RA	370		27	1.4	ug/Kg	4	☼	8270C	Total/NA
Benzo[k]fluoranthene - RA	350		27	2.8	ug/Kg	4	☼	8270C	Total/NA
Carbazole - RA	430		210	110	ug/Kg	4	☼	8270C	Total/NA
Chrysene - RA	2200		27	4.5	ug/Kg	4	☼	8270C	Total/NA
Dibenzofuran - RA	180	J	210	2.7	ug/Kg	4	☼	8270C	Total/NA
Di-n-butyl phthalate - RA	69	J B	290	62	ug/Kg	4	☼	8270C	Total/NA
Fluoranthene - RA	4400		27	2.3	ug/Kg	4	☼	8270C	Total/NA
Fluorene - RA	120		27	2.2	ug/Kg	4	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene - RA	270		27	1.4	ug/Kg	4	☼	8270C	Total/NA
Naphthalene - RA	370		27	3.4	ug/Kg	4	☼	8270C	Total/NA
Phenol - RA	32	J	210	30	ug/Kg	4	☼	8270C	Total/NA
Phenanthrene - RA	3100		27	3.0	ug/Kg	4	☼	8270C	Total/NA
Pyrene - RA	3500		27	1.8	ug/Kg	4	☼	8270C	Total/NA
Aroclor-1260	44		32	16	ug/Kg	1	☼	8082	Total/NA
Polychlorinated biphenyls, Total	44		32	13	ug/Kg	1	☼	8082	Total/NA
Arsenic	0.0090	J	0.50	0.0032	mg/L	1		6010B	Total/NA
Barium	0.15	J B	10	0.00067	mg/L	1		6010B	Total/NA
Cadmium	0.036	J	0.10	0.00066	mg/L	1		6010B	Total/NA
Chromium	2.4		0.50	0.0022	mg/L	1		6010B	Total/NA
Lead	0.14	J	0.50	0.0019	mg/L	1		6010B	Total/NA
Selenium	0.014	J	0.25	0.0041	mg/L	1		6010B	Total/NA

Client Sample ID: SP-04-ISM-01 — Lab Sample ID: 240-27737-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	9.2	J	49	3.4	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	59		6.5	0.49	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-04-ISM-01 (Continued) — Lab Sample ID: 240-27737-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	20		6.5	0.75	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	7.4		6.5	0.34	ug/Kg	1	☼	8270C	Total/NA
Acetophenone	51	J	98	9.0	ug/Kg	1	☼	8270C	Total/NA
Anthracene	51		6.5	0.76	ug/Kg	1	☼	8270C	Total/NA
Benzaldehyde	36	J	98	12	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	340		6.5	0.62	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	490		6.5	0.63	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	880		6.5	0.58	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	500		6.5	0.34	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	280		6.5	0.67	ug/Kg	1	☼	8270C	Total/NA
Caprolactam	46	J	320	36	ug/Kg	1	☼	8270C	Total/NA
Carbazole	33	J	49	26	ug/Kg	1	☼	8270C	Total/NA
Chrysene	540		6.5	1.1	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	110		6.5	0.65	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	34	J	49	0.65	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	23	J	69	16	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	40	J B	69	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	450		6.5	0.54	ug/Kg	1	☼	8270C	Total/NA
Fluorene	22		6.5	0.52	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	420		6.5	0.34	ug/Kg	1	☼	8270C	Total/NA
Isophorone	19	J	49	13	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	54		6.5	0.80	ug/Kg	1	☼	8270C	Total/NA
Phenol	20	J	49	7.2	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	250		6.5	0.72	ug/Kg	1	☼	8270C	Total/NA
Pyrene	480		6.5	0.43	ug/Kg	1	☼	8270C	Total/NA
Arsenic	0.049	J	0.50	0.0032	mg/L	1		6010B	Total/NA
Barium	0.15	J B	10	0.00067	mg/L	1		6010B	Total/NA
Chromium	0.69		0.50	0.0022	mg/L	1		6010B	Total/NA
Selenium	0.012	J	0.25	0.0041	mg/L	1		6010B	Total/NA

Client Sample ID: SP-05-ISM-01 — Lab Sample ID: 240-27737-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	12	J	51	3.6	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	47		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	27		6.8	0.77	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	7.9		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Acetophenone	20	J	100	9.4	ug/Kg	1	☼	8270C	Total/NA
Anthracene	92		6.8	0.79	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	480		6.8	0.64	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	400		6.8	0.65	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	930		6.8	0.60	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	350		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	250		6.8	0.69	ug/Kg	1	☼	8270C	Total/NA
Caprolactam	40	J	340	38	ug/Kg	1	☼	8270C	Total/NA
Carbazole	51		51	28	ug/Kg	1	☼	8270C	Total/NA
Chrysene	690		6.8	1.1	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	84		6.8	0.67	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	45	J	51	0.67	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	18	J	71	16	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-05-ISM-01 (Continued) — Lab Sample ID: 240-27737-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	33	J B	71	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	650		6.8	0.56	ug/Kg	1	☼	8270C	Total/NA
Fluorene	26		6.8	0.54	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	310		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Isophorone	13	J	51	13	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	52		6.8	0.84	ug/Kg	1	☼	8270C	Total/NA
Phenol	9.8	J	51	7.4	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	420		6.8	0.74	ug/Kg	1	☼	8270C	Total/NA
Pyrene	540		6.8	0.45	ug/Kg	1	☼	8270C	Total/NA
Arsenic	0.015	J	0.50	0.0032	mg/L	1		6010B	Total/NA
Barium	0.17	J B	10	0.00067	mg/L	1		6010B	Total/NA
Cadmium	0.0015	J	0.10	0.00066	mg/L	1		6010B	Total/NA
Chromium	0.37	J	0.50	0.0022	mg/L	1		6010B	Total/NA
Lead	0.0027	J	0.50	0.0019	mg/L	1		6010B	Total/NA
Selenium	0.0088	J	0.25	0.0041	mg/L	1		6010B	Total/NA

Client Sample ID: SP-06-ISM-01 — Lab Sample ID: 240-27737-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1'-Biphenyl	22	J	51	3.6	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	99		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Acenaphthene	55		6.8	0.78	ug/Kg	1	☼	8270C	Total/NA
Acenaphthylene	37		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Acetophenone	38	J	100	9.4	ug/Kg	1	☼	8270C	Total/NA
Anthracene	210		6.8	0.80	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	680		6.8	0.64	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	760		6.8	0.65	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	1000		6.8	0.60	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	550		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	290		6.8	0.69	ug/Kg	1	☼	8270C	Total/NA
Caprolactam	48	J	340	38	ug/Kg	1	☼	8270C	Total/NA
Carbazole	150		51	28	ug/Kg	1	☼	8270C	Total/NA
Chrysene	700		6.8	1.1	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	130		6.8	0.67	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	98		51	0.67	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	22	J	71	16	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	50	J B	71	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	1200		6.8	0.56	ug/Kg	1	☼	8270C	Total/NA
Fluorene	120		6.8	0.54	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	470		6.8	0.36	ug/Kg	1	☼	8270C	Total/NA
Isophorone	17	J	51	13	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	210		6.8	0.84	ug/Kg	1	☼	8270C	Total/NA
Phenol	35	J	51	7.5	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	930		6.8	0.75	ug/Kg	1	☼	8270C	Total/NA
Pyrene	960		6.8	0.45	ug/Kg	1	☼	8270C	Total/NA
3 & 4 Methylphenol	20	J	410	20	ug/Kg	1	☼	8270C	Total/NA
Aroclor-1260	34		32	17	ug/Kg	1	☼	8082	Total/NA
Polychlorinated biphenyls, Total	34		32	13	ug/Kg	1	☼	8082	Total/NA
Arsenic	0.018	J	0.50	0.0032	mg/L	1		6010B	Total/NA
Barium	0.31	J B	10	0.00067	mg/L	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-06-ISM-01 (Continued) — Lab Sample ID: 240-27737-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.42	J	0.50	0.0022	mg/L	1		6010B	Total/NA
Selenium	0.0082	J	0.25	0.0041	mg/L	1		6010B	Total/NA

Client Sample ID: SP-EB-ISM-01 — Lab Sample ID: 240-27737-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetophenone	0.46	J	0.95	0.32	ug/L	1		8270C	Total/NA
Benzaldehyde	0.81	J	0.95	0.37	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	0.28	J B	1.9	0.21	ug/L	1		8270C	Total/NA
Naphthalene	0.13	J	0.19	0.060	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-01-ISM-01
Date Collected: 08/05/13 15:20
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-1
Matrix: Solid
Percent Solids: 98.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<23		330	23	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
bis (2-chloroisopropyl) ether	<63		660	63	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,4,5-Trichlorophenol	<170		990	170	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,4,6-Trichlorophenol	<59		990	59	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,4-Dichlorophenol	<130		990	130	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,4-Dimethylphenol	<130		990	130	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,4-Dinitrophenol	<140		2200	140	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,4-Dinitrotoluene	<110		1300	110	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2,6-Dinitrotoluene	<140		1300	140	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2-Chloronaphthalene	<3.0		330	3.0	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2-Chlorophenol	<54		330	54	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2-Methylnaphthalene	**410**		44	3.3	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2-Methylphenol	<73		1300	73	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2-Nitroaniline	<60		1300	60	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
2-Nitrophenol	<55		330	55	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
3,3'-Dichlorobenzidine	<120		660	120	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
3-Nitroaniline	<110		1300	110	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4,6-Dinitro-2-methylphenol	<61		990	61	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4-Bromophenyl phenyl ether	<86		330	86	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4-Chloro-3-methylphenol	<140		990	140	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4-Chloroaniline	<110		990	110	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4-Chlorophenyl phenyl ether	<86		330	86	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4-Nitroaniline	<170		1300	170	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
4-Nitrophenol	<110		2200	110	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Acenaphthene	**83**		44	5.0	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Acenaphthylene	**110**		44	2.3	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Acetophenone	**75**	**J**	660	61	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Anthracene	**330**		44	5.2	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Atrazine	<60		1300	60	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Benzaldehyde	<80	*	660	80	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Benzo[a]anthracene	**1800**		44	4.2	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Benzo[a]pyrene	**2000**		44	4.2	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Benzo[b]fluoranthene	**2600**		44	3.9	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Benzo[g,h,i]perylene	**1300**		44	2.3	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Benzo[k]fluoranthene	**850**		44	4.5	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Bis(2-chloroethoxy)methane	<150		660	150	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Bis(2-chloroethyl)ether	<13		660	13	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Bis(2-ethylhexyl) phthalate	**200**	**J B**	460	130	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Butyl benzyl phthalate	<66		460	66	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Caprolactam	<250		2200	250	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Carbazole	<180		330	180	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Chrysene	**1900**		44	7.3	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Dibenz(a,h)anthracene	**330**		44	4.4	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Dibenzofuran	**140**	**J**	330	4.4	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Diethyl phthalate	<110		460	110	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Dimethyl phthalate	<110		460	110	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Di-n-butyl phthalate	<99		460	99	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Di-n-octyl phthalate	<52		460	52	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Fluoranthene	**3500**		44	3.6	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-01-ISM-01

Date Collected: 08/05/13 15:20
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-1

Matrix: Solid
Percent Solids: 98.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**87**		44	3.5	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Hexachlorobenzene	<14		44	14	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Hexachlorobutadiene	<37		330	37	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Hexachlorocyclopentadiene	<54		2200	54	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Hexachloroethane	<60		330	60	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Indeno[1,2,3-cd]pyrene	**1200**		44	2.3	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Isophorone	<86		330	86	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Naphthalene	**300**		44	5.4	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Nitrobenzene	<15		660	15	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
N-Nitrosodi-n-propylamine	<42		330	42	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Pentachlorophenol	<60		990	60	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Phenol	<48		330	48	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Phenanthrene	**1300**		44	4.8	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Pyrene	**3100**		44	2.9	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
3 & 4 Methylphenol	<130		2700	130	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
Pyridine	<23		660	23	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667
1,4-Dichlorobenzene	<130		330	130	ug/Kg	☼	08/19/13 11:20	08/21/13 11:40	6.667

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*24 - 110*	*08/19/13 11:20*	*08/21/13 11:40*	*6.667*
2-Fluorophenol (Surr)	*71*		*24 - 110*	*08/19/13 11:20*	*08/21/13 11:40*	*6.667*
2,4,6-Tribromophenol (Surr)	*102*		*10 - 110*	*08/19/13 11:20*	*08/21/13 11:40*	*6.667*
Nitrobenzene-d5 (Surr)	*84*		*20 - 110*	*08/19/13 11:20*	*08/21/13 11:40*	*6.667*
Phenol-d5 (Surr)	*82*		*26 - 110*	*08/19/13 11:20*	*08/21/13 11:40*	*6.667*
Terphenyl-d14 (Surr)	*93*		*36 - 110*	*08/19/13 11:20*	*08/21/13 11:40*	*6.667*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<100		160	100	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1221	<79		160	79	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1232	<69		160	69	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1242	<64		160	64	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1248	<84		160	84	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1254	<84		160	84	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1260	<84		160	84	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1262	<130		160	130	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Aroclor-1268	<69		160	69	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5
Polychlorinated biphenyls, Total	<64		160	64	ug/Kg	☼	08/19/13 10:38	08/22/13 07:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*29 - 151*	*08/19/13 10:38*	*08/22/13 07:18*	*5*
DCB Decachlorobiphenyl	*64*		*14 - 163*	*08/19/13 10:38*	*08/22/13 07:18*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0064		1.0	0.0064	mg/L		08/21/13 09:58	08/22/13 20:43	2
Barium	**0.34**	**J B**	10	0.00067	mg/L		08/21/13 09:58	08/22/13 16:06	1
Cadmium	<0.00066		0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 16:06	1
Chromium	**0.0089**	**J**	0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:06	1
Lead	<0.0019		0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 16:06	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-01-ISM-01

Lab Sample ID: 240-27737-1

Date Collected: 08/05/13 15:20

Matrix: Solid

Date Received: 08/08/13 09:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.012**	**J**	0.50	0.0082	mg/L		08/21/13 09:58	08/22/13 20:43	2
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:44	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-02-ISM-01

Date Collected: 08/06/13 10:10
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-2

Matrix: Solid
Percent Solids: 99.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**25**	**J**	51	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
bis (2-chloroisopropyl) ether	<9.7		100	9.7	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,4,5-Trichlorophenol	<26		150	26	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,4,6-Trichlorophenol	<9.1		150	9.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,4-Dichlorophenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,4-Dimethylphenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,4-Dinitrophenol	<21		340	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,4-Dinitrotoluene	<17		200	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2,6-Dinitrotoluene	<21		200	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2-Chloronaphthalene	<0.46		51	0.46	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2-Chlorophenol	<8.4		51	8.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2-Methylnaphthalene	**62**		6.8	0.51	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2-Methylphenol	<11		200	11	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2-Nitroaniline	<9.3		200	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
2-Nitrophenol	<8.5		51	8.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
3,3'-Dichlorobenzidine	<18		100	18	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
3-Nitroaniline	<16		200	16	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4,6-Dinitro-2-methylphenol	<9.4		150	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4-Bromophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4-Chloro-3-methylphenol	<21		150	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4-Chloroaniline	<17		150	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4-Chlorophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4-Nitroaniline	<27		200	27	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
4-Nitrophenol	<17		340	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Acenaphthene	**260**		6.8	0.78	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Acenaphthylene	**8.6**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Acetophenone	**27**	**J**	100	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Anthracene	**660**		6.8	0.80	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Atrazine	<9.3		200	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Benzaldehyde	<12		100	12	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Benzo[a]anthracene	**1200**		6.8	0.64	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Benzo[a]pyrene	**970**		6.8	0.65	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Benzo[b]fluoranthene	**1700**	**E**	6.8	0.60	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Benzo[g,h,i]perylene	**600**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Benzo[k]fluoranthene	**460**		6.8	0.69	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Bis(2-chloroethoxy)methane	<22		100	22	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Bis(2-chloroethyl)ether	<2.0		100	2.0	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Bis(2-ethylhexyl) phthalate	**76**		71	19	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Butyl benzyl phthalate	<10		71	10	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Caprolactam	**39**	**J**	340	38	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Carbazole	**370**		51	28	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Chrysene	**1600**		6.8	1.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Dibenz(a,h)anthracene	**150**		6.8	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Dibenzofuran	**150**		51	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Diethyl phthalate	<16		71	16	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Dimethyl phthalate	<17		71	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Di-n-butyl phthalate	**40**	**J B**	71	15	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Di-n-octyl phthalate	<8.1		71	8.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Fluoranthene	**2800**	**E**	6.8	0.56	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-02-ISM-01

Date Collected: 08/06/13 10:10
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-2

Matrix: Solid
Percent Solids: 99.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**210**		6.8	0.54	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Hexachlorobenzene	**18**		6.8	2.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Hexachlorobutadiene	<5.7		51	5.7	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Hexachlorocyclopentadiene	<8.3		340	8.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Hexachloroethane	<9.2		51	9.2	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Indeno[1,2,3-cd]pyrene	**500**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Isophorone	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Naphthalene	**130**		6.8	0.84	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Nitrobenzene	<2.2		100	2.2	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
N-Nitrosodi-n-propylamine	<6.4		51	6.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Pentachlorophenol	<9.3		150	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Phenol	**17**	**J**	51	7.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Phenanthrene	**2500**	**E**	6.8	0.75	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Pyrene	**2600**	**E**	6.8	0.45	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
3 & 4 Methylphenol	<20		410	20	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
Pyridine	<3.6		100	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1
1,4-Dichlorobenzene	<20		51	20	ug/Kg	☼	08/20/13 13:00	08/22/13 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*24 - 110*	*08/20/13 13:00*	*08/22/13 10:31*	*1*
2-Fluorophenol (Surr)	*67*		*24 - 110*	*08/20/13 13:00*	*08/22/13 10:31*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*10 - 110*	*08/20/13 13:00*	*08/22/13 10:31*	*1*
Nitrobenzene-d5 (Surr)	*71*		*20 - 110*	*08/20/13 13:00*	*08/22/13 10:31*	*1*
Phenol-d5 (Surr)	*72*		*26 - 110*	*08/20/13 13:00*	*08/22/13 10:31*	*1*
Terphenyl-d14 (Surr)	*96*		*36 - 110*	*08/20/13 13:00*	*08/22/13 10:31*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**26**	**J**	130	8.9	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
bis (2-chloroisopropyl) ether	<24		260	24	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,4,5-Trichlorophenol	<64		380	64	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,4,6-Trichlorophenol	<23		380	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,4-Dichlorophenol	<51		380	51	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,4-Dimethylphenol	<51		380	51	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,4-Dinitrophenol	<54		840	54	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,4-Dinitrotoluene	<43		510	43	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2,6-Dinitrotoluene	<54		510	54	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2-Chloronaphthalene	<1.1		130	1.1	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2-Chlorophenol	<21		130	21	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2-Methylnaphthalene	**67**		17	1.3	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2-Methylphenol	<28		510	28	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2-Nitroaniline	<23		510	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
2-Nitrophenol	<21		130	21	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
3,3'-Dichlorobenzidine	<46		260	46	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
3-Nitroaniline	<41		510	41	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
4,6-Dinitro-2-methylphenol	<23		380	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
4-Bromophenyl phenyl ether	<33		130	33	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
4-Chloro-3-methylphenol	<54		380	54	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
4-Chloroaniline	<43		380	43	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
4-Chlorophenyl phenyl ether	<33		130	33	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-02-ISM-01

Date Collected: 08/06/13 10:10
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-2

Matrix: Solid
Percent Solids: 99.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	<66		510	66	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
4-Nitrophenol	<43		840	43	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Acenaphthene	**260**		17	1.9	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Acenaphthylene	**8.7**	**J**	17	0.89	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Acetophenone	**26**	**J**	260	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Anthracene	**630**		17	2.0	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Atrazine	<23		510	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Benzaldehyde	**32**	**J**	260	31	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Benzo[a]anthracene	**1200**		17	1.6	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Benzo[a]pyrene	**900**		17	1.6	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Benzo[b]fluoranthene	**1600**		17	1.5	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Benzo[g,h,i]perylene	**590**		17	0.89	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Benzo[k]fluoranthene	**380**		17	1.7	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Bis(2-chloroethoxy)methane	<56		260	56	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Bis(2-chloroethyl)ether	<5.1		260	5.1	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Bis(2-ethylhexyl) phthalate	<49		180	49	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Butyl benzyl phthalate	<26		180	26	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Caprolactam	<94		840	94	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Carbazole	**350**		130	69	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Chrysene	**1500**		17	2.8	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Dibenz(a,h)anthracene	**130**		17	1.7	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Dibenzofuran	**150**		130	1.7	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Diethyl phthalate	<41		180	41	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Dimethyl phthalate	<43		180	43	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Di-n-butyl phthalate	**41**	**J B**	180	38	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Di-n-octyl phthalate	<20		180	20	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Fluoranthene	**3000**		17	1.4	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Fluorene	**210**		17	1.4	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Hexachlorobenzene	<5.4		17	5.4	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Hexachlorobutadiene	<14		130	14	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Hexachlorocyclopentadiene	<21		840	21	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Hexachloroethane	<23		130	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Indeno[1,2,3-cd]pyrene	**460**		17	0.89	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Isophorone	<33		130	33	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Naphthalene	**130**		17	2.1	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Nitrobenzene	<5.6		260	5.6	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
N-Nitrosodi-n-propylamine	<16		130	16	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Pentachlorophenol	<23		380	23	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Phenol	<19		130	19	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Phenanthrene	**2500**		17	1.9	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Pyrene	**2600**		17	1.1	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
3 & 4 Methylphenol	<51		1000	51	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
Pyridine	<8.9		260	8.9	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5
1,4-Dichlorobenzene	<51		130	51	ug/Kg	☼	08/20/13 13:00	08/23/13 13:39	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*24 - 110*	*08/20/13 13:00*	*08/23/13 13:39*	*2.5*
2-Fluorophenol (Surr)	*63*		*24 - 110*	*08/20/13 13:00*	*08/23/13 13:39*	*2.5*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 110*	*08/20/13 13:00*	*08/23/13 13:39*	*2.5*
Nitrobenzene-d5 (Surr)	*69*		*20 - 110*	*08/20/13 13:00*	*08/23/13 13:39*	*2.5*

Client Sample ID: SP-02-ISM-01

Date Collected: 08/06/13 10:10
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-2

Matrix: Solid
Percent Solids: 99.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5 (Surr)	*68*		*26 - 110*	*08/20/13 13:00*	*08/23/13 13:39*	*2.5*
Terphenyl-d14 (Surr)	*93*		*36 - 110*	*08/20/13 13:00*	*08/23/13 13:39*	*2.5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<200		320	200	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1221	<150		320	150	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1232	<130		320	130	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1242	<130		320	130	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1248	<160		320	160	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1254	<160		320	160	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1260	<160		320	160	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1262	<260		320	260	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Aroclor-1268	<130		320	130	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10
Polychlorinated biphenyls, Total	<130		320	130	ug/Kg	☼	08/20/13 12:50	08/21/13 17:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*191*	*X*	*29 - 151*	*08/20/13 12:50*	*08/21/13 17:05*	*10*
DCB Decachlorobiphenyl	*68*		*14 - 163*	*08/20/13 12:50*	*08/21/13 17:05*	*10*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0063**	**J**	0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 16:10	1
Barium	**0.34**	**J B**	10	0.00067	mg/L		08/21/13 09:58	08/22/13 16:10	1
Cadmium	**0.0087**	**J**	0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 16:10	1
Chromium	**0.063**	**J**	0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:10	1
Lead	**0.15**	**J**	0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 16:10	1
Selenium	**0.0058**	**J**	0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 16:10	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:45	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-03-ISM-01

Date Collected: 08/06/13 15:17
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-3

Matrix: Solid
Percent Solids: 98.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**35**	**J**	51	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
bis (2-chloroisopropyl) ether	<9.8		100	9.8	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,4,5-Trichlorophenol	<26		150	26	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,4,6-Trichlorophenol	<9.1		150	9.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,4-Dichlorophenol	<21		150	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,4-Dimethylphenol	<21		150	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,4-Dinitrophenol	<22		340	22	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,4-Dinitrotoluene	<17		210	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2,6-Dinitrotoluene	<22		210	22	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2-Chloronaphthalene	<0.46		51	0.46	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2-Chlorophenol	<8.4		51	8.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2-Methylnaphthalene	**330**		6.9	0.51	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2-Methylphenol	<11		210	11	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2-Nitroaniline	<9.4		210	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
2-Nitrophenol	<8.5		51	8.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
3,3'-Dichlorobenzidine	<19		100	19	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
3-Nitroaniline	<16		210	16	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4,6-Dinitro-2-methylphenol	<9.5		150	9.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4-Bromophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4-Chloro-3-methylphenol	<22		150	22	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4-Chloroaniline	<17		150	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4-Chlorophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4-Nitroaniline	<27		210	27	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
4-Nitrophenol	<17		340	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Acenaphthene	**210**		6.9	0.78	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Acenaphthylene	**21**		6.9	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Acetophenone	**35**	**J**	100	9.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Anthracene	**690**		6.9	0.80	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Atrazine	<9.4		210	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Benzaldehyde	**69**	**J**	100	12	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Benzo[a]anthracene	**1800**	**E**	6.9	0.65	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Benzo[a]pyrene	**850**		6.9	0.66	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Benzo[b]fluoranthene	**2000**	**E**	6.9	0.61	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Benzo[g,h,i]perylene	**400**		6.9	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Benzo[k]fluoranthene	**460**		6.9	0.70	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Bis(2-chloroethoxy)methane	<23		100	23	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Bis(2-chloroethyl)ether	<2.1		100	2.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Bis(2-ethylhexyl) phthalate	**78**		72	20	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Butyl benzyl phthalate	<10		72	10	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Caprolactam	**43**	**J**	340	38	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Carbazole	**450**		51	28	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Chrysene	**2500**	**E**	6.9	1.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Dibenz(a,h)anthracene	**99**		6.9	0.68	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Dibenzofuran	**190**		51	0.68	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Diethyl phthalate	<16		72	16	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Dimethyl phthalate	<17		72	17	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Di-n-butyl phthalate	**83**	**B**	72	15	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Di-n-octyl phthalate	<8.1		72	8.1	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Fluoranthene	**3800**	**E**	6.9	0.57	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-03-ISM-01

Date Collected: 08/06/13 15:17
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-3

Matrix: Solid
Percent Solids: 98.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**130**		6.9	0.54	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Hexachlorobenzene	<2.2		6.9	2.2	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Hexachlorobutadiene	<5.8		51	5.8	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Hexachlorocyclopentadiene	<8.3		340	8.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Hexachloroethane	<9.3		51	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Indeno[1,2,3-cd]pyrene	**320**		6.9	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Isophorone	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Naphthalene	**400**		6.9	0.84	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Nitrobenzene	<2.3		100	2.3	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
N-Nitrosodi-n-propylamine	<6.5		51	6.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Pentachlorophenol	<9.4		150	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Phenol	**39**	**J**	51	7.5	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Phenanthrene	**3000**	**E**	6.9	0.75	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Pyrene	**3400**	**E**	6.9	0.45	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
3 & 4 Methylphenol	<21		410	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
Pyridine	<3.6		100	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1
1,4-Dichlorobenzene	**21**	**J**	51	21	ug/Kg	☼	08/20/13 13:00	08/22/13 10:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*24 - 110*	*08/20/13 13:00*	*08/22/13 10:54*	*1*
2-Fluorophenol (Surr)	*65*		*24 - 110*	*08/20/13 13:00*	*08/22/13 10:54*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*10 - 110*	*08/20/13 13:00*	*08/22/13 10:54*	*1*
Nitrobenzene-d5 (Surr)	*66*		*20 - 110*	*08/20/13 13:00*	*08/22/13 10:54*	*1*
Phenol-d5 (Surr)	*68*		*26 - 110*	*08/20/13 13:00*	*08/22/13 10:54*	*1*
Terphenyl-d14 (Surr)	*83*		*36 - 110*	*08/20/13 13:00*	*08/22/13 10:54*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**33**	**J**	210	14	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
bis (2-chloroisopropyl) ether	<39		410	39	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,4,5-Trichlorophenol	<100		620	100	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,4,6-Trichlorophenol	<37		620	37	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,4-Dichlorophenol	<82		620	82	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,4-Dimethylphenol	<82		620	82	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,4-Dinitrophenol	<86		1400	86	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,4-Dinitrotoluene	<70		820	70	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2,6-Dinitrotoluene	<86		820	86	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2-Chloronaphthalene	<1.9		210	1.9	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2-Chlorophenol	<34		210	34	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2-Methylnaphthalene	**300**		27	2.1	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2-Methylphenol	<45		820	45	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2-Nitroaniline	<37		820	37	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
2-Nitrophenol	<34		210	34	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
3,3'-Dichlorobenzidine	<74		410	74	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
3-Nitroaniline	<66		820	66	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
4,6-Dinitro-2-methylphenol	<38		620	38	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
4-Bromophenyl phenyl ether	<53		210	53	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
4-Chloro-3-methylphenol	<86		620	86	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
4-Chloroaniline	<70		620	70	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
4-Chlorophenyl phenyl ether	<53		210	53	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-03-ISM-01

Date Collected: 08/06/13 15:17
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-3

Matrix: Solid
Percent Solids: 98.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	<110		820	110	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
4-Nitrophenol	<70		1400	70	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Acenaphthene	**210**		27	3.1	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Acenaphthylene	**20**	**J**	27	1.4	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Acetophenone	**40**	**J**	410	38	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Anthracene	**640**		27	3.2	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Atrazine	<37		820	37	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Benzaldehyde	**66**	**J**	410	49	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Benzo[a]anthracene	**1500**		27	2.6	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Benzo[a]pyrene	**790**		27	2.6	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Benzo[b]fluoranthene	**1700**		27	2.4	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Benzo[g,h,i]perylene	**370**		27	1.4	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Benzo[k]fluoranthene	**350**		27	2.8	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Bis(2-chloroethoxy)methane	<90		410	90	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Bis(2-chloroethyl)ether	<8.2		410	8.2	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Bis(2-ethylhexyl) phthalate	<78		290	78	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Butyl benzyl phthalate	<41		290	41	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Caprolactam	<150		1400	150	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Carbazole	**430**		210	110	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Chrysene	**2200**		27	4.5	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Dibenz(a,h)anthracene	<2.7		27	2.7	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Dibenzofuran	**180**	**J**	210	2.7	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Diethyl phthalate	<66		290	66	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Dimethyl phthalate	<70		290	70	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Di-n-butyl phthalate	**69**	**J B**	290	62	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Di-n-octyl phthalate	<32		290	32	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Fluoranthene	**4400**		27	2.3	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Fluorene	**120**		27	2.2	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Hexachlorobenzene	<8.6		27	8.6	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Hexachlorobutadiene	<23		210	23	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Hexachlorocyclopentadiene	<33		1400	33	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Hexachloroethane	<37		210	37	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Indeno[1,2,3-cd]pyrene	**270**		27	1.4	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Isophorone	<53		210	53	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Naphthalene	**370**		27	3.4	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Nitrobenzene	<9.0		410	9.0	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
N-Nitrosodi-n-propylamine	<26		210	26	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Pentachlorophenol	<37		620	37	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Phenol	**32**	**J**	210	30	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Phenanthrene	**3100**		27	3.0	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Pyrene	**3500**		27	1.8	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
3 & 4 Methylphenol	<82		1600	82	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
Pyridine	<14		410	14	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4
1,4-Dichlorobenzene	<82		210	82	ug/Kg	☼	08/20/13 13:00	08/23/13 14:03	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*24 - 110*	*08/20/13 13:00*	*08/23/13 14:03*	*4*
2-Fluorophenol (Surr)	*58*		*24 - 110*	*08/20/13 13:00*	*08/23/13 14:03*	*4*
2,4,6-Tribromophenol (Surr)	*57*		*10 - 110*	*08/20/13 13:00*	*08/23/13 14:03*	*4*
Nitrobenzene-d5 (Surr)	*59*		*20 - 110*	*08/20/13 13:00*	*08/23/13 14:03*	*4*

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-03-ISM-01

Date Collected: 08/06/13 15:17
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-3

Matrix: Solid
Percent Solids: 98.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5 (Surr)	*61*		*26 - 110*	*08/20/13 13:00*	*08/23/13 14:03*	*4*
Terphenyl-d14 (Surr)	*75*		*36 - 110*	*08/20/13 13:00*	*08/23/13 14:03*	*4*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<20		32	20	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1221	<16		32	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1232	<14		32	14	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1242	<13		32	13	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1248	<16		32	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1254	<16		32	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1260	**44**		32	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1262	<26		32	26	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Aroclor-1268	<14		32	14	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1
Polychlorinated biphenyls, Total	**44**		32	13	ug/Kg	☼	08/20/13 12:50	08/21/13 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*93*		*29 - 151*	*08/20/13 12:50*	*08/21/13 17:19*	*1*
DCB Decachlorobiphenyl	*56*		*14 - 163*	*08/20/13 12:50*	*08/21/13 17:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0090**	**J**	0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 16:22	1
Barium	**0.15**	**J B**	10	0.00067	mg/L		08/21/13 09:58	08/22/13 16:22	1
Cadmium	**0.036**	**J**	0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 16:22	1
Chromium	**2.4**		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:22	1
Lead	**0.14**	**J**	0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 16:22	1
Selenium	**0.014**	**J**	0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 16:22	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:47	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-04-ISM-01

Date Collected: 08/06/13 16:54
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-4

Matrix: Solid
Percent Solids: 95.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**9.2**	**J**	49	3.4	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
bis (2-chloroisopropyl) ether	<9.3		98	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,4,5-Trichlorophenol	<25		150	25	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,4,6-Trichlorophenol	<8.7		150	8.7	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,4-Dichlorophenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,4-Dimethylphenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,4-Dinitrophenol	<21		320	21	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,4-Dinitrotoluene	<17		200	17	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2,6-Dinitrotoluene	<21		200	21	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2-Chloronaphthalene	<0.44		49	0.44	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2-Chlorophenol	<8.0		49	8.0	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2-Methylnaphthalene	**59**		6.5	0.49	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2-Methylphenol	<11		200	11	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2-Nitroaniline	<8.9		200	8.9	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
2-Nitrophenol	<8.1		49	8.1	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
3,3'-Dichlorobenzidine	<18		98	18	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
3-Nitroaniline	<16		200	16	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4,6-Dinitro-2-methylphenol	<9.0		150	9.0	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4-Bromophenyl phenyl ether	<13		49	13	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4-Chloro-3-methylphenol	<21		150	21	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4-Chloroaniline	<17		150	17	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4-Chlorophenyl phenyl ether	<13		49	13	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4-Nitroaniline	<25		200	25	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
4-Nitrophenol	<17		320	17	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Acenaphthene	**20**		6.5	0.75	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Acenaphthylene	**7.4**		6.5	0.34	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Acetophenone	**51**	**J**	98	9.0	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Anthracene	**51**		6.5	0.76	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Atrazine	<8.9		200	8.9	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Benzaldehyde	**36**	**J**	98	12	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Benzo[a]anthracene	**340**		6.5	0.62	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Benzo[a]pyrene	**490**		6.5	0.63	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Benzo[b]fluoranthene	**880**		6.5	0.58	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Benzo[g,h,i]perylene	**500**		6.5	0.34	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Benzo[k]fluoranthene	**280**		6.5	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Bis(2-chloroethoxy)methane	<22		98	22	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Bis(2-chloroethyl)ether	<2.0		98	2.0	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Bis(2-ethylhexyl) phthalate	<19		69	19	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Butyl benzyl phthalate	<9.8		69	9.8	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Caprolactam	**46**	**J**	320	36	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Carbazole	**33**	**J**	49	26	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Chrysene	**540**		6.5	1.1	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Dibenz(a,h)anthracene	**110**		6.5	0.65	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Dibenzofuran	**34**	**J**	49	0.65	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Diethyl phthalate	**23**	**J**	69	16	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Dimethyl phthalate	<17		69	17	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Di-n-butyl phthalate	**40**	**J B**	69	15	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Di-n-octyl phthalate	<7.7		69	7.7	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Fluoranthene	**450**		6.5	0.54	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-04-ISM-01

Date Collected: 08/06/13 16:54
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-4

Matrix: Solid
Percent Solids: 95.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**22**		6.5	0.52	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Hexachlorobenzene	<2.1		6.5	2.1	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Hexachlorobutadiene	<5.5		49	5.5	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Hexachlorocyclopentadiene	<7.9		320	7.9	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Hexachloroethane	<8.8		49	8.8	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Indeno[1,2,3-cd]pyrene	**420**		6.5	0.34	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Isophorone	**19**	**J**	49	13	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Naphthalene	**54**		6.5	0.80	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Nitrobenzene	<2.2		98	2.2	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
N-Nitrosodi-n-propylamine	<6.2		49	6.2	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Pentachlorophenol	<8.9		150	8.9	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Phenol	**20**	**J**	49	7.2	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Phenanthrene	**250**		6.5	0.72	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Pyrene	**480**		6.5	0.43	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
3 & 4 Methylphenol	<20		390	20	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
Pyridine	<3.4		98	3.4	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1
1,4-Dichlorobenzene	<20		49	20	ug/Kg	☼	08/20/13 13:00	08/22/13 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*	*08/20/13 13:00*	*08/22/13 12:06*	*1*
2-Fluorophenol (Surr)	*73*		*24 - 110*	*08/20/13 13:00*	*08/22/13 12:06*	*1*
2,4,6-Tribromophenol (Surr)	*74*		*10 - 110*	*08/20/13 13:00*	*08/22/13 12:06*	*1*
Nitrobenzene-d5 (Surr)	*73*		*20 - 110*	*08/20/13 13:00*	*08/22/13 12:06*	*1*
Phenol-d5 (Surr)	*77*		*26 - 110*	*08/20/13 13:00*	*08/22/13 12:06*	*1*
Terphenyl-d14 (Surr)	*99*		*36 - 110*	*08/20/13 13:00*	*08/22/13 12:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<22		35	22	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1221	<17		35	17	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1232	<15		35	15	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1242	<14		35	14	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1248	<18		35	18	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1254	<18		35	18	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1260	<18		35	18	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1262	<29		35	29	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Aroclor-1268	<15		35	15	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1
Polychlorinated biphenyls, Total	<14		35	14	ug/Kg	☼	08/20/13 12:50	08/21/13 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*38*		*29 - 151*	*08/20/13 12:50*	*08/21/13 17:33*	*1*
DCB Decachlorobiphenyl	*46*		*14 - 163*	*08/20/13 12:50*	*08/21/13 17:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.049**	**J**	0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 16:27	1
Barium	**0.15**	**J B**	10	0.00067	mg/L		08/21/13 09:58	08/22/13 16:27	1
Cadmium	<0.00066		0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 16:27	1
Chromium	**0.69**		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:27	1
Lead	<0.0019		0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 16:27	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-04-ISM-01

Lab Sample ID: 240-27737-4

Date Collected: 08/06/13 16:54

Matrix: Solid

Date Received: 08/08/13 09:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.012**	**J**	0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 16:27	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:49	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-05-ISM-01

Date Collected: 08/07/13 10:40
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-5

Matrix: Solid
Percent Solids: 97.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**12**	**J**	51	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
bis (2-chloroisopropyl) ether	<9.7		100	9.7	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,4,5-Trichlorophenol	<25		150	25	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,4,6-Trichlorophenol	<9.1		150	9.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,4-Dichlorophenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,4-Dimethylphenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,4-Dinitrophenol	<21		340	21	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,4-Dinitrotoluene	<17		200	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2,6-Dinitrotoluene	<21		200	21	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2-Chloronaphthalene	<0.46		51	0.46	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2-Chlorophenol	<8.4		51	8.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2-Methylnaphthalene	**47**		6.8	0.51	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2-Methylphenol	<11		200	11	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2-Nitroaniline	<9.3		200	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
2-Nitrophenol	<8.5		51	8.5	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
3,3'-Dichlorobenzidine	<18		100	18	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
3-Nitroaniline	<16		200	16	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4,6-Dinitro-2-methylphenol	<9.4		150	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4-Bromophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4-Chloro-3-methylphenol	<21		150	21	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4-Chloroaniline	<17		150	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4-Chlorophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4-Nitroaniline	<26		200	26	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
4-Nitrophenol	<17		340	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Acenaphthene	**27**		6.8	0.77	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Acenaphthylene	**7.9**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Acetophenone	**20**	**J**	100	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Anthracene	**92**		6.8	0.79	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Atrazine	<9.3		200	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Benzaldehyde	<12		100	12	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Benzo[a]anthracene	**480**		6.8	0.64	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Benzo[a]pyrene	**400**		6.8	0.65	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Benzo[b]fluoranthene	**930**		6.8	0.60	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Benzo[g,h,i]perylene	**350**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Benzo[k]fluoranthene	**250**		6.8	0.69	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Bis(2-chloroethoxy)methane	<22		100	22	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Bis(2-chloroethyl)ether	<2.0		100	2.0	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Bis(2-ethylhexyl) phthalate	<19		71	19	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Butyl benzyl phthalate	<10		71	10	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Caprolactam	**40**	**J**	340	38	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Carbazole	**51**		51	28	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Chrysene	**690**		6.8	1.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Dibenz(a,h)anthracene	**84**		6.8	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Dibenzofuran	**45**	**J**	51	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Diethyl phthalate	**18**	**J**	71	16	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Dimethyl phthalate	<17		71	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Di-n-butyl phthalate	**33**	**J B**	71	15	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Di-n-octyl phthalate	<8.0		71	8.0	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Fluoranthene	**650**		6.8	0.56	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-05-ISM-01

Date Collected: 08/07/13 10:40
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-5

Matrix: Solid
Percent Solids: 97.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**26**		6.8	0.54	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Hexachlorobenzene	<2.1		6.8	2.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Hexachlorobutadiene	<5.7		51	5.7	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Hexachlorocyclopentadiene	<8.3		340	8.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Hexachloroethane	<9.2		51	9.2	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Indeno[1,2,3-cd]pyrene	**310**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Isophorone	**13**	**J**	51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Naphthalene	**52**		6.8	0.84	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Nitrobenzene	<2.2		100	2.2	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
N-Nitrosodi-n-propylamine	<6.4		51	6.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Pentachlorophenol	<9.3		150	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Phenol	**9.8**	**J**	51	7.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Phenanthrene	**420**		6.8	0.74	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Pyrene	**540**		6.8	0.45	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
3 & 4 Methylphenol	<20		410	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
Pyridine	<3.6		100	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1
1,4-Dichlorobenzene	<20		51	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*24 - 110*	*08/20/13 13:00*	*08/22/13 11:18*	*1*
2-Fluorophenol (Surr)	*41*		*24 - 110*	*08/20/13 13:00*	*08/22/13 11:18*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*10 - 110*	*08/20/13 13:00*	*08/22/13 11:18*	*1*
Nitrobenzene-d5 (Surr)	*62*		*20 - 110*	*08/20/13 13:00*	*08/22/13 11:18*	*1*
Phenol-d5 (Surr)	*44*		*26 - 110*	*08/20/13 13:00*	*08/22/13 11:18*	*1*
Terphenyl-d14 (Surr)	*94*		*36 - 110*	*08/20/13 13:00*	*08/22/13 11:18*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<20		31	20	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1221	<15		31	15	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1232	<13		31	13	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1242	<12		31	12	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1248	<16		31	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1254	<16		31	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1260	<16		31	16	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1262	<26		31	26	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Aroclor-1268	<13		31	13	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1
Polychlorinated biphenyls, Total	<12		31	12	ug/Kg	☼	08/20/13 12:50	08/21/13 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*40*		*29 - 151*	*08/20/13 12:50*	*08/21/13 17:48*	*1*
DCB Decachlorobiphenyl	*49*		*14 - 163*	*08/20/13 12:50*	*08/21/13 17:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.015**	**J**	0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 16:31	1
Barium	**0.17**	**J B**	10	0.00067	mg/L		08/21/13 09:58	08/22/13 16:31	1
Cadmium	**0.0015**	**J**	0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 16:31	1
Chromium	**0.37**	**J**	0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:31	1
Lead	**0.0027**	**J**	0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 16:31	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-05-ISM-01

Lab Sample ID: 240-27737-5

Date Collected: 08/07/13 10:40

Matrix: Solid

Date Received: 08/08/13 09:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.0088**	**J**	0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 16:31	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:51	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-06-ISM-01

Date Collected: 08/07/13 11:45
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-6

Matrix: Solid
Percent Solids: 96.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**22**	**J**	51	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
bis (2-chloroisopropyl) ether	<9.7		100	9.7	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,4,5-Trichlorophenol	<26		150	26	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,4,6-Trichlorophenol	<9.1		150	9.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,4-Dichlorophenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,4-Dimethylphenol	<20		150	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,4-Dinitrophenol	<21		340	21	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,4-Dinitrotoluene	<17		200	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2,6-Dinitrotoluene	<21		200	21	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2-Chloronaphthalene	<0.46		51	0.46	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2-Chlorophenol	<8.4		51	8.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2-Methylnaphthalene	**99**		6.8	0.51	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2-Methylphenol	<11		200	11	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2-Nitroaniline	<9.3		200	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
2-Nitrophenol	<8.5		51	8.5	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
3,3'-Dichlorobenzidine	<18		100	18	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
3-Nitroaniline	<16		200	16	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4,6-Dinitro-2-methylphenol	<9.4		150	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4-Bromophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4-Chloro-3-methylphenol	<21		150	21	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4-Chloroaniline	<17		150	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4-Chlorophenyl phenyl ether	<13		51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4-Nitroaniline	<27		200	27	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
4-Nitrophenol	<17		340	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Acenaphthene	**55**		6.8	0.78	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Acenaphthylene	**37**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Acetophenone	**38**	**J**	100	9.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Anthracene	**210**		6.8	0.80	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Atrazine	<9.3		200	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Benzaldehyde	<12		100	12	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Benzo[a]anthracene	**680**		6.8	0.64	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Benzo[a]pyrene	**760**		6.8	0.65	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Benzo[b]fluoranthene	**1000**		6.8	0.60	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Benzo[g,h,i]perylene	**550**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Benzo[k]fluoranthene	**290**		6.8	0.69	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Bis(2-chloroethoxy)methane	<22		100	22	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Bis(2-chloroethyl)ether	<2.0		100	2.0	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Bis(2-ethylhexyl) phthalate	<19		71	19	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Butyl benzyl phthalate	<10		71	10	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Caprolactam	**48**	**J**	340	38	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Carbazole	**150**		51	28	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Chrysene	**700**		6.8	1.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Dibenz(a,h)anthracene	**130**		6.8	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Dibenzofuran	**98**		51	0.67	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Diethyl phthalate	**22**	**J**	71	16	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Dimethyl phthalate	<17		71	17	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Di-n-butyl phthalate	**50**	**J B**	71	15	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Di-n-octyl phthalate	<8.1		71	8.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Fluoranthene	**1200**		6.8	0.56	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1

Client Sample ID: SP-06-ISM-01

Date Collected: 08/07/13 11:45
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-6

Matrix: Solid
Percent Solids: 96.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**120**		6.8	0.54	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Hexachlorobenzene	<2.1		6.8	2.1	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Hexachlorobutadiene	<5.7		51	5.7	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Hexachlorocyclopentadiene	<8.3		340	8.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Hexachloroethane	<9.2		51	9.2	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Indeno[1,2,3-cd]pyrene	**470**		6.8	0.36	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Isophorone	**17**	**J**	51	13	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Naphthalene	**210**		6.8	0.84	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Nitrobenzene	<2.2		100	2.2	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
N-Nitrosodi-n-propylamine	<6.4		51	6.4	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Pentachlorophenol	<9.3		150	9.3	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Phenol	**35**	**J**	51	7.5	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Phenanthrene	**930**		6.8	0.75	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Pyrene	**960**		6.8	0.45	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
3 & 4 Methylphenol	**20**	**J**	410	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
Pyridine	<3.6		100	3.6	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1
1,4-Dichlorobenzene	<20		51	20	ug/Kg	☼	08/20/13 13:00	08/22/13 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*24 - 110*	*08/20/13 13:00*	*08/22/13 11:42*	*1*
2-Fluorophenol (Surr)	*67*		*24 - 110*	*08/20/13 13:00*	*08/22/13 11:42*	*1*
2,4,6-Tribromophenol (Surr)	*52*		*10 - 110*	*08/20/13 13:00*	*08/22/13 11:42*	*1*
Nitrobenzene-d5 (Surr)	*70*		*20 - 110*	*08/20/13 13:00*	*08/22/13 11:42*	*1*
Phenol-d5 (Surr)	*74*		*26 - 110*	*08/20/13 13:00*	*08/22/13 11:42*	*1*
Terphenyl-d14 (Surr)	*96*		*36 - 110*	*08/20/13 13:00*	*08/22/13 11:42*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<20		32	20	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1221	<16		32	16	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1232	<14		32	14	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1242	<13		32	13	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1248	<17		32	17	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1254	<17		32	17	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1260	**34**		32	17	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1262	<26		32	26	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Aroclor-1268	<14		32	14	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1
Polychlorinated biphenyls, Total	**34**		32	13	ug/Kg	☼	08/20/13 12:50	08/21/13 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*29 - 151*	*08/20/13 12:50*	*08/21/13 18:02*	*1*
DCB Decachlorobiphenyl	*48*		*14 - 163*	*08/20/13 12:50*	*08/21/13 18:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.018**	**J**	0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 16:35	1
Barium	**0.31**	**J B**	10	0.00067	mg/L		08/21/13 09:58	08/22/13 16:35	1
Cadmium	<0.00066		0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 16:35	1
Chromium	**0.42**	**J**	0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:35	1
Lead	<0.0019		0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 16:35	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-06-ISM-01

Lab Sample ID: 240-27737-6

Date Collected: 08/07/13 11:45

Matrix: Solid

Date Received: 08/08/13 09:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.0082**	**J**	0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 16:35	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 16:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:54	1

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-EB-ISM-01
Date Collected: 08/06/13 10:13
Date Received: 08/08/13 09:00

Lab Sample ID: 240-27737-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<0.12		0.95	0.12	ug/L		08/13/13 10:49	08/15/13 13:01	1
bis (2-chloroisopropyl) ether	<0.38		0.95	0.38	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,4,5-Trichlorophenol	<0.29		4.8	0.29	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,4,6-Trichlorophenol	<0.23		4.8	0.23	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,4-Dichlorophenol	<0.18		1.9	0.18	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,4-Dimethylphenol	<0.24		1.9	0.24	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,4-Dinitrophenol	<0.30		4.8	0.30	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,4-Dinitrotoluene	<0.24		4.8	0.24	ug/L		08/13/13 10:49	08/15/13 13:01	1
2,6-Dinitrotoluene	<0.76		4.8	0.76	ug/L		08/13/13 10:49	08/15/13 13:01	1
2-Chloronaphthalene	<0.095		0.95	0.095	ug/L		08/13/13 10:49	08/15/13 13:01	1
2-Chlorophenol	<0.28		0.95	0.28	ug/L		08/13/13 10:49	08/15/13 13:01	1
2-Methylnaphthalene	<0.086		0.19	0.086	ug/L		08/13/13 10:49	08/15/13 13:01	1
2-Methylphenol	<0.16		0.95	0.16	ug/L		08/13/13 10:49	08/15/13 13:01	1
2-Nitroaniline	<0.20		1.9	0.20	ug/L		08/13/13 10:49	08/15/13 13:01	1
2-Nitrophenol	<0.27		1.9	0.27	ug/L		08/13/13 10:49	08/15/13 13:01	1
3,3'-Dichlorobenzidine	<0.35		4.8	0.35	ug/L		08/13/13 10:49	08/15/13 13:01	1
3-Nitroaniline	<0.27		1.9	0.27	ug/L		08/13/13 10:49	08/15/13 13:01	1
4,6-Dinitro-2-methylphenol	<2.3		4.8	2.3	ug/L		08/13/13 10:49	08/15/13 13:01	1
4-Bromophenyl phenyl ether	<0.21		1.9	0.21	ug/L		08/13/13 10:49	08/15/13 13:01	1
4-Chloro-3-methylphenol	<0.20		1.9	0.20	ug/L		08/13/13 10:49	08/15/13 13:01	1
4-Chloroaniline	<0.20		1.9	0.20	ug/L		08/13/13 10:49	08/15/13 13:01	1
4-Chlorophenyl phenyl ether	<0.29		1.9	0.29	ug/L		08/13/13 10:49	08/15/13 13:01	1
4-Nitroaniline	<0.21		1.9	0.21	ug/L		08/13/13 10:49	08/15/13 13:01	1
4-Nitrophenol	<0.28		4.8	0.28	ug/L		08/13/13 10:49	08/15/13 13:01	1
Acenaphthene	<0.042		0.19	0.042	ug/L		08/13/13 10:49	08/15/13 13:01	1
Acenaphthylene	<0.046		0.19	0.046	ug/L		08/13/13 10:49	08/15/13 13:01	1
Acetophenone	**0.46**	**J**	0.95	0.32	ug/L		08/13/13 10:49	08/15/13 13:01	1
Anthracene	<0.084		0.19	0.084	ug/L		08/13/13 10:49	08/15/13 13:01	1
Atrazine	<0.32		0.95	0.32	ug/L		08/13/13 10:49	08/15/13 13:01	1
Benzaldehyde	**0.81**	**J**	0.95	0.37	ug/L		08/13/13 10:49	08/15/13 13:01	1
Benzo[a]anthracene	<0.028		0.19	0.028	ug/L		08/13/13 10:49	08/15/13 13:01	1
Benzo[a]pyrene	<0.049		0.19	0.049	ug/L		08/13/13 10:49	08/15/13 13:01	1
Benzo[b]fluoranthene	<0.038		0.19	0.038	ug/L		08/13/13 10:49	08/15/13 13:01	1
Benzo[g,h,i]perylene	<0.044		0.19	0.044	ug/L		08/13/13 10:49	08/15/13 13:01	1
Benzo[k]fluoranthene	<0.043		0.19	0.043	ug/L		08/13/13 10:49	08/15/13 13:01	1
Bis(2-chloroethoxy)methane	<0.30		0.95	0.30	ug/L		08/13/13 10:49	08/15/13 13:01	1
Bis(2-chloroethyl)ether	<0.095		0.95	0.095	ug/L		08/13/13 10:49	08/15/13 13:01	1
Bis(2-ethylhexyl) phthalate	**0.28**	**J B**	1.9	0.21	ug/L		08/13/13 10:49	08/15/13 13:01	1
Butyl benzyl phthalate	<0.25		1.9	0.25	ug/L		08/13/13 10:49	08/15/13 13:01	1
Caprolactam	<0.19		4.8	0.19	ug/L		08/13/13 10:49	08/15/13 13:01	1
Carbazole	<0.27		0.95	0.27	ug/L		08/13/13 10:49	08/15/13 13:01	1
Chrysene	<0.048		0.19	0.048	ug/L		08/13/13 10:49	08/15/13 13:01	1
Dibenz(a,h)anthracene	<0.042		0.19	0.042	ug/L		08/13/13 10:49	08/15/13 13:01	1
Dibenzofuran	<0.019		0.95	0.019	ug/L		08/13/13 10:49	08/15/13 13:01	1
Diethyl phthalate	<0.57		1.9	0.57	ug/L		08/13/13 10:49	08/15/13 13:01	1
Dimethyl phthalate	<0.28		1.9	0.28	ug/L		08/13/13 10:49	08/15/13 13:01	1
Di-n-butyl phthalate	<0.64		1.9	0.64	ug/L		08/13/13 10:49	08/15/13 13:01	1
Di-n-octyl phthalate	<0.22		1.9	0.22	ug/L		08/13/13 10:49	08/15/13 13:01	1
Fluoranthene	<0.042		0.19	0.042	ug/L		08/13/13 10:49	08/15/13 13:01	1

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-EB-ISM-01

Lab Sample ID: 240-27737-7

Date Collected: 08/06/13 10:13
Matrix: Water
Date Received: 08/08/13 09:00

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.039		0.19	0.039	ug/L		08/13/13 10:49	08/15/13 13:01	1
Hexachlorobenzene	<0.081		0.19	0.081	ug/L		08/13/13 10:49	08/15/13 13:01	1
Hexachlorobutadiene	<0.26		0.95	0.26	ug/L		08/13/13 10:49	08/15/13 13:01	1
Hexachlorocyclopentadiene	<0.23		9.5	0.23	ug/L		08/13/13 10:49	08/15/13 13:01	1
Hexachloroethane	<0.18		0.95	0.18	ug/L		08/13/13 10:49	08/15/13 13:01	1
Indeno[1,2,3-cd]pyrene	<0.041		0.19	0.041	ug/L		08/13/13 10:49	08/15/13 13:01	1
Isophorone	<0.26		0.95	0.26	ug/L		08/13/13 10:49	08/15/13 13:01	1
Naphthalene	**0.13**	**J**	0.19	0.060	ug/L		08/13/13 10:49	08/15/13 13:01	1
Nitrobenzene	<0.038		0.95	0.038	ug/L		08/13/13 10:49	08/15/13 13:01	1
N-Nitrosodi-n-propylamine	<0.23		0.95	0.23	ug/L		08/13/13 10:49	08/15/13 13:01	1
Pentachlorophenol	<0.26		4.8	0.26	ug/L		08/13/13 10:49	08/15/13 13:01	1
Phenol	<0.57		0.95	0.57	ug/L		08/13/13 10:49	08/15/13 13:01	1
Phenanthrene	<0.059		0.19	0.059	ug/L		08/13/13 10:49	08/15/13 13:01	1
Pyrene	<0.040		0.19	0.040	ug/L		08/13/13 10:49	08/15/13 13:01	1
3 & 4 Methylphenol	<0.76		1.9	0.76	ug/L		08/13/13 10:49	08/15/13 13:01	1
Pyridine	<0.33		0.95	0.33	ug/L		08/13/13 10:49	08/15/13 13:01	1
1,4-Dichlorobenzene	<0.32		0.95	0.32	ug/L		08/13/13 10:49	08/15/13 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*20 - 110*	*08/13/13 10:49*	*08/15/13 13:01*	*1*
2-Fluorophenol (Surr)	*79*		*10 - 110*	*08/13/13 10:49*	*08/15/13 13:01*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*21 - 110*	*08/13/13 10:49*	*08/15/13 13:01*	*1*
Nitrobenzene-d5 (Surr)	*84*		*21 - 110*	*08/13/13 10:49*	*08/15/13 13:01*	*1*
Phenol-d5 (Surr)	*82*		*21 - 110*	*08/13/13 10:49*	*08/15/13 13:01*	*1*
Terphenyl-d14 (Surr)	*99*		*24 - 110*	*08/13/13 10:49*	*08/15/13 13:01*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.67		200	0.67	ug/L		08/14/13 08:01	08/15/13 11:40	1
Cadmium	<0.66		2.0	0.66	ug/L		08/14/13 08:01	08/15/13 11:40	1
Chromium	<2.2		5.0	2.2	ug/L		08/14/13 08:01	08/15/13 11:40	1
Silver	<2.2		5.0	2.2	ug/L		08/14/13 08:01	08/15/13 11:40	1
Arsenic	<3.2		10	3.2	ug/L		08/14/13 08:01	08/15/13 11:40	1
Lead	<1.9		3.0	1.9	ug/L		08/14/13 08:01	08/15/13 11:40	1
Selenium	<4.1		5.0	4.1	ug/L		08/14/13 08:01	08/15/13 11:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.12		0.20	0.12	ug/L		08/14/13 09:00	08/14/13 12:22	1

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-27737-1	SP-01-ISM-01	75	71	102	84	82	93
240-27737-2	SP-02-ISM-01	70	67	69	71	72	96
240-27737-2 - RA	SP-02-ISM-01	69	63	67	69	68	93
240-27737-3	SP-03-ISM-01	63	65	67	66	68	83
240-27737-3 - RA	SP-03-ISM-01	61	58	57	59	61	75
240-27737-4	SP-04-ISM-01	74	73	74	73	77	99
240-27737-5	SP-05-ISM-01	70	41	69	62	44	94
240-27737-6	SP-06-ISM-01	71	67	52	70	74	96
LCS 240-98019/14-A	Lab Control Sample	76	80	83	93	83	105
LCS 240-98217/7-A	Lab Control Sample	72	75	72	76	77	98
MB 240-98019/13-A	Method Blank	72	68	58	88	78	104
MB 240-98217/6-A	Method Blank	68	60	44	66	66	94

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(20-110)	(10-110)	(21-110)	(21-110)	(21-110)	(24-110)
240-27737-7	SP-EB-ISM-01	76	79	73	84	82	99
LCS 240-97238/17-A	Lab Control Sample	79	72	81	83	80	101
MB 240-97238/16-A	Method Blank	79	84	70	85	87	110

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(29-151)	(14-163)
240-27737-1	SP-01-ISM-01	81	64
LCS 240-98018/17-A	Lab Control Sample	174 X	89
MB 240-98018/16-A	Method Blank	92	76

Surrogate Legend

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	**Client Sample ID**	**TCX1 (29-151)**	**DCB1 (14-163)**							
240-27737-2	SP-02-ISM-01	191 X	68							
240-27737-3	SP-03-ISM-01	93	56							
240-27737-4	SP-04-ISM-01	38	46							
240-27737-5	SP-05-ISM-01	40	49							
240-27737-6	SP-06-ISM-01	51	48							
LCS 240-98211/7-A	Lab Control Sample	65	82							
MB 240-98211/6-A	Method Blank	61	79							

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-97238/16-A
Matrix: Water
Analysis Batch: 97595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<0.13		1.0	0.13	ug/L		08/13/13 10:49	08/15/13 11:51	1
bis (2-chloroisopropyl) ether	<0.40		1.0	0.40	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,4,5-Trichlorophenol	<0.30		5.0	0.30	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,4,6-Trichlorophenol	<0.24		5.0	0.24	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,4-Dichlorophenol	<0.19		2.0	0.19	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,4-Dimethylphenol	<0.25		2.0	0.25	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,4-Dinitrophenol	<0.32		5.0	0.32	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,4-Dinitrotoluene	<0.25		5.0	0.25	ug/L		08/13/13 10:49	08/15/13 11:51	1
2,6-Dinitrotoluene	<0.80		5.0	0.80	ug/L		08/13/13 10:49	08/15/13 11:51	1
2-Chloronaphthalene	<0.10		1.0	0.10	ug/L		08/13/13 10:49	08/15/13 11:51	1
2-Chlorophenol	<0.29		1.0	0.29	ug/L		08/13/13 10:49	08/15/13 11:51	1
2-Methylnaphthalene	<0.090		0.20	0.090	ug/L		08/13/13 10:49	08/15/13 11:51	1
2-Methylphenol	<0.17		1.0	0.17	ug/L		08/13/13 10:49	08/15/13 11:51	1
2-Nitroaniline	<0.21		2.0	0.21	ug/L		08/13/13 10:49	08/15/13 11:51	1
2-Nitrophenol	<0.28		2.0	0.28	ug/L		08/13/13 10:49	08/15/13 11:51	1
3,3'-Dichlorobenzidine	<0.37		5.0	0.37	ug/L		08/13/13 10:49	08/15/13 11:51	1
3-Nitroaniline	<0.28		2.0	0.28	ug/L		08/13/13 10:49	08/15/13 11:51	1
4,6-Dinitro-2-methylphenol	<2.4		5.0	2.4	ug/L		08/13/13 10:49	08/15/13 11:51	1
4-Bromophenyl phenyl ether	<0.22		2.0	0.22	ug/L		08/13/13 10:49	08/15/13 11:51	1
4-Chloro-3-methylphenol	<0.21		2.0	0.21	ug/L		08/13/13 10:49	08/15/13 11:51	1
4-Chloroaniline	<0.21		2.0	0.21	ug/L		08/13/13 10:49	08/15/13 11:51	1
4-Chlorophenyl phenyl ether	<0.30		2.0	0.30	ug/L		08/13/13 10:49	08/15/13 11:51	1
4-Nitroaniline	<0.22		2.0	0.22	ug/L		08/13/13 10:49	08/15/13 11:51	1
4-Nitrophenol	<0.29		5.0	0.29	ug/L		08/13/13 10:49	08/15/13 11:51	1
Acenaphthene	<0.044		0.20	0.044	ug/L		08/13/13 10:49	08/15/13 11:51	1
Acenaphthylene	<0.048		0.20	0.048	ug/L		08/13/13 10:49	08/15/13 11:51	1
Acetophenone	<0.34		1.0	0.34	ug/L		08/13/13 10:49	08/15/13 11:51	1
Anthracene	<0.088		0.20	0.088	ug/L		08/13/13 10:49	08/15/13 11:51	1
Atrazine	<0.34		1.0	0.34	ug/L		08/13/13 10:49	08/15/13 11:51	1
Benzaldehyde	<0.39		1.0	0.39	ug/L		08/13/13 10:49	08/15/13 11:51	1
Benzo[a]anthracene	<0.030		0.20	0.030	ug/L		08/13/13 10:49	08/15/13 11:51	1
Benzo[a]pyrene	<0.051		0.20	0.051	ug/L		08/13/13 10:49	08/15/13 11:51	1
Benzo[b]fluoranthene	<0.039		0.20	0.039	ug/L		08/13/13 10:49	08/15/13 11:51	1
Benzo[g,h,i]perylene	<0.046		0.20	0.046	ug/L		08/13/13 10:49	08/15/13 11:51	1
Benzo[k]fluoranthene	<0.045		0.20	0.045	ug/L		08/13/13 10:49	08/15/13 11:51	1
Bis(2-chloroethoxy)methane	<0.32		1.0	0.32	ug/L		08/13/13 10:49	08/15/13 11:51	1
Bis(2-chloroethyl)ether	<0.10		1.0	0.10	ug/L		08/13/13 10:49	08/15/13 11:51	1
Bis(2-ethylhexyl) phthalate	0.441	J	2.0	0.22	ug/L		08/13/13 10:49	08/15/13 11:51	1
Butyl benzyl phthalate	<0.26		2.0	0.26	ug/L		08/13/13 10:49	08/15/13 11:51	1
Caprolactam	<0.20		5.0	0.20	ug/L		08/13/13 10:49	08/15/13 11:51	1
Carbazole	<0.28		1.0	0.28	ug/L		08/13/13 10:49	08/15/13 11:51	1
Chrysene	<0.050		0.20	0.050	ug/L		08/13/13 10:49	08/15/13 11:51	1
Dibenz(a,h)anthracene	<0.045		0.20	0.045	ug/L		08/13/13 10:49	08/15/13 11:51	1
Dibenzofuran	<0.020		1.0	0.020	ug/L		08/13/13 10:49	08/15/13 11:51	1
Diethyl phthalate	<0.60		2.0	0.60	ug/L		08/13/13 10:49	08/15/13 11:51	1
Dimethyl phthalate	<0.29		2.0	0.29	ug/L		08/13/13 10:49	08/15/13 11:51	1
Di-n-butyl phthalate	<0.67		2.0	0.67	ug/L		08/13/13 10:49	08/15/13 11:51	1
Di-n-octyl phthalate	<0.23		2.0	0.23	ug/L		08/13/13 10:49	08/15/13 11:51	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-97238/16-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 97595 — **Prep Batch: 97238**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.045		0.20	0.045	ug/L		08/13/13 10:49	08/15/13 11:51	1
Fluorene	<0.041		0.20	0.041	ug/L		08/13/13 10:49	08/15/13 11:51	1
Hexachlorobenzene	<0.085		0.20	0.085	ug/L		08/13/13 10:49	08/15/13 11:51	1
Hexachlorobutadiene	<0.27		1.0	0.27	ug/L		08/13/13 10:49	08/15/13 11:51	1
Hexachlorocyclopentadiene	<0.24		10	0.24	ug/L		08/13/13 10:49	08/15/13 11:51	1
Hexachloroethane	<0.19		1.0	0.19	ug/L		08/13/13 10:49	08/15/13 11:51	1
Indeno[1,2,3-cd]pyrene	<0.043		0.20	0.043	ug/L		08/13/13 10:49	08/15/13 11:51	1
Isophorone	<0.27		1.0	0.27	ug/L		08/13/13 10:49	08/15/13 11:51	1
Naphthalene	<0.063		0.20	0.063	ug/L		08/13/13 10:49	08/15/13 11:51	1
Nitrobenzene	<0.040		1.0	0.040	ug/L		08/13/13 10:49	08/15/13 11:51	1
N-Nitrosodi-n-propylamine	<0.24		1.0	0.24	ug/L		08/13/13 10:49	08/15/13 11:51	1
Pentachlorophenol	<0.27		5.0	0.27	ug/L		08/13/13 10:49	08/15/13 11:51	1
Phenol	<0.60		1.0	0.60	ug/L		08/13/13 10:49	08/15/13 11:51	1
Phenanthrene	<0.062		0.20	0.062	ug/L		08/13/13 10:49	08/15/13 11:51	1
Pyrene	<0.042		0.20	0.042	ug/L		08/13/13 10:49	08/15/13 11:51	1
3 & 4 Methylphenol	<0.80		2.0	0.80	ug/L		08/13/13 10:49	08/15/13 11:51	1
Pyridine	<0.35		1.0	0.35	ug/L		08/13/13 10:49	08/15/13 11:51	1
1,4-Dichlorobenzene	<0.34		1.0	0.34	ug/L		08/13/13 10:49	08/15/13 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*20 - 110*	*08/13/13 10:49*	*08/15/13 11:51*	*1*
2-Fluorophenol (Surr)	*84*		*10 - 110*	*08/13/13 10:49*	*08/15/13 11:51*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*21 - 110*	*08/13/13 10:49*	*08/15/13 11:51*	*1*
Nitrobenzene-d5 (Surr)	*85*		*21 - 110*	*08/13/13 10:49*	*08/15/13 11:51*	*1*
Phenol-d5 (Surr)	*87*		*21 - 110*	*08/13/13 10:49*	*08/15/13 11:51*	*1*
Terphenyl-d14 (Surr)	*110*		*24 - 110*	*08/13/13 10:49*	*08/15/13 11:51*	*1*

Lab Sample ID: LCS 240-97238/17-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 97775 — **Prep Batch: 97238**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	16.2		ug/L		81	43 - 110
bis (2-chloroisopropyl) ether	20.0	14.5		ug/L		73	37 - 110
2,4,5-Trichlorophenol	20.0	16.6		ug/L		83	48 - 110
2,4,6-Trichlorophenol	20.0	16.2		ug/L		81	45 - 110
2,4-Dichlorophenol	20.0	16.5		ug/L		82	41 - 110
2,4-Dimethylphenol	20.0	16.2		ug/L		81	32 - 110
2,4-Dinitrophenol	40.0	30.3		ug/L		76	10 - 110
2,4-Dinitrotoluene	20.0	19.5		ug/L		97	53 - 110
2,6-Dinitrotoluene	20.0	19.1		ug/L		96	54 - 110
2-Chloronaphthalene	20.0	15.9		ug/L		80	43 - 110
2-Chlorophenol	20.0	16.4		ug/L		82	29 - 110
2-Methylnaphthalene	20.0	16.1		ug/L		80	45 - 110
2-Methylphenol	20.0	16.0		ug/L		80	42 - 110
2-Nitroaniline	20.0	17.9		ug/L		90	54 - 110
2-Nitrophenol	20.0	17.7		ug/L		88	40 - 110
3,3'-Dichlorobenzidine	40.0	37.4		ug/L		94	22 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-97238/17-A
Matrix: Water
Analysis Batch: 97775

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3-Nitroaniline	20.0	18.2		ug/L		91	53 - 110
4,6-Dinitro-2-methylphenol	40.0	37.0		ug/L		93	31 - 110
4-Bromophenyl phenyl ether	20.0	17.3		ug/L		86	45 - 110
4-Chloro-3-methylphenol	20.0	16.9		ug/L		84	52 - 110
4-Chloroaniline	20.0	16.1		ug/L		81	44 - 110
4-Chlorophenyl phenyl ether	20.0	16.7		ug/L		84	47 - 110
4-Nitroaniline	20.0	20.9		ug/L		105	54 - 110
4-Nitrophenol	40.0	39.1		ug/L		98	33 - 112
Acenaphthene	20.0	16.6		ug/L		83	47 - 110
Acenaphthylene	20.0	15.8		ug/L		79	49 - 110
Acetophenone	20.0	16.8		ug/L		84	46 - 110
Anthracene	20.0	17.6		ug/L		88	52 - 110
Atrazine	40.0	34.9		ug/L		87	66 - 126
Benzaldehyde	40.0	32.4		ug/L		81	38 - 110
Benzo[a]anthracene	20.0	17.0		ug/L		85	52 - 110
Benzo[a]pyrene	20.0	16.8		ug/L		84	44 - 110
Benzo[b]fluoranthene	20.0	18.6		ug/L		93	48 - 110
Benzo[g,h,i]perylene	20.0	17.6		ug/L		88	50 - 110
Benzo[k]fluoranthene	20.0	17.2		ug/L		86	49 - 110
Bis(2-chloroethoxy)methane	20.0	16.5		ug/L		82	43 - 110
Bis(2-chloroethyl)ether	20.0	15.5		ug/L		78	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	17.9		ug/L		89	39 - 116
Butyl benzyl phthalate	20.0	19.2		ug/L		96	55 - 110
Caprolactam	40.0	37.1		ug/L		93	45 - 111
Carbazole	20.0	20.7		ug/L		103	55 - 110
Chrysene	20.0	17.5		ug/L		87	55 - 110
Dibenz(a,h)anthracene	20.0	15.8		ug/L		79	49 - 110
Dibenzofuran	20.0	16.7		ug/L		84	51 - 110
Diethyl phthalate	20.0	17.8		ug/L		89	58 - 110
Dimethyl phthalate	20.0	17.4		ug/L		87	57 - 110
Di-n-butyl phthalate	20.0	18.4		ug/L		92	57 - 110
Di-n-octyl phthalate	20.0	15.8		ug/L		79	40 - 110
Fluoranthene	20.0	17.6		ug/L		88	54 - 110
Fluorene	20.0	16.7		ug/L		83	52 - 110
Hexachlorobenzene	20.0	15.8		ug/L		79	50 - 110
Hexachlorobutadiene	20.0	13.0		ug/L		65	33 - 110
Hexachlorocyclopentadiene	20.0	2.12	J	ug/L		11	10 - 110
Hexachloroethane	20.0	13.1		ug/L		65	35 - 110
Indeno[1,2,3-cd]pyrene	20.0	15.7		ug/L		79	50 - 110
Isophorone	20.0	14.7		ug/L		74	49 - 110
Naphthalene	20.0	15.4		ug/L		77	44 - 110
Nitrobenzene	20.0	16.4		ug/L		82	42 - 110
N-Nitrosodi-n-propylamine	20.0	16.1		ug/L		81	47 - 110
Pentachlorophenol	40.0	28.6		ug/L		72	18 - 110
Phenol	20.0	16.2		ug/L		81	33 - 110
Phenanthrene	20.0	17.2		ug/L		86	53 - 110
Pyrene	20.0	18.7		ug/L		93	52 - 110
3 & 4 Methylphenol	20.0	16.4		ug/L		82	44 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-97238/17-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 97775 — **Prep Batch: 97238**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyridine	20.0	3.31		ug/L		17	10 - 110
1,4-Dichlorobenzene	20.0	13.8		ug/L		69	39 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*79*		*20 - 110*
2-Fluorophenol (Surr)	*72*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*81*		*21 - 110*
Nitrobenzene-d5 (Surr)	*83*		*21 - 110*
Phenol-d5 (Surr)	*80*		*21 - 110*
Terphenyl-d14 (Surr)	*101*		*24 - 110*

Lab Sample ID: MB 240-98019/13-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98300 — **Prep Batch: 98019**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<3.5		50	3.5	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
bis (2-chloroisopropyl) ether	<9.5		100	9.5	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,4,5-Trichlorophenol	<25		150	25	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,4,6-Trichlorophenol	<8.9		150	8.9	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,4-Dichlorophenol	<20		150	20	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,4-Dimethylphenol	<20		150	20	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,4-Dinitrophenol	<21		330	21	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,4-Dinitrotoluene	<17		200	17	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2,6-Dinitrotoluene	<21		200	21	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2-Chloronaphthalene	<0.45		50	0.45	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2-Chlorophenol	<8.2		50	8.2	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2-Methylnaphthalene	<0.50		6.7	0.50	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2-Methylphenol	<11		200	11	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2-Nitroaniline	<9.1		200	9.1	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
2-Nitrophenol	<8.3		50	8.3	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
3,3'-Dichlorobenzidine	<18		100	18	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
3-Nitroaniline	<16		200	16	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4,6-Dinitro-2-methylphenol	<9.2		150	9.2	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4-Bromophenyl phenyl ether	<13		50	13	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4-Chloro-3-methylphenol	<21		150	21	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4-Chloroaniline	<17		150	17	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4-Chlorophenyl phenyl ether	<13		50	13	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4-Nitroaniline	<26		200	26	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
4-Nitrophenol	<17		330	17	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Acenaphthene	<0.76		6.7	0.76	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Acenaphthylene	<0.35		6.7	0.35	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Acetophenone	<9.2		100	9.2	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Anthracene	<0.78		6.7	0.78	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Atrazine	<9.1		200	9.1	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Benzaldehyde	<12		100	12	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Benzo[a]anthracene	<0.63		6.7	0.63	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Benzo[a]pyrene	<0.64		6.7	0.64	ug/Kg		08/19/13 10:44	08/21/13 08:45	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-98019/13-A
Matrix: Solid
Analysis Batch: 98300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<0.59		6.7	0.59	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Benzo[g,h,i]perylene	<0.35		6.7	0.35	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Benzo[k]fluoranthene	<0.68		6.7	0.68	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Bis(2-chloroethoxy)methane	<22		100	22	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Bis(2-chloroethyl)ether	<2.0		100	2.0	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Bis(2-ethylhexyl) phthalate	45.4	J	70	19	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Butyl benzyl phthalate	<10		70	10	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Caprolactam	<37		330	37	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Carbazole	<27		50	27	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Chrysene	<1.1		6.7	1.1	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Dibenz(a,h)anthracene	<0.66		6.7	0.66	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Dibenzofuran	<0.66		50	0.66	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Diethyl phthalate	<16		70	16	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Dimethyl phthalate	<17		70	17	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Di-n-butyl phthalate	32.0	J	70	15	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Di-n-octyl phthalate	<7.9		70	7.9	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Fluoranthene	<0.55		6.7	0.55	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Fluorene	<0.53		6.7	0.53	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Hexachlorobenzene	<2.1		6.7	2.1	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Hexachlorobutadiene	<5.6		50	5.6	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Hexachlorocyclopentadiene	<8.1		330	8.1	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Hexachloroethane	<9.0		50	9.0	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Indeno[1,2,3-cd]pyrene	<0.35		6.7	0.35	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Isophorone	<13		50	13	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Naphthalene	<0.82		6.7	0.82	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Nitrobenzene	<2.2		100	2.2	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
N-Nitrosodi-n-propylamine	<6.3		50	6.3	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Pentachlorophenol	<9.1		150	9.1	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Phenol	<7.3		50	7.3	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Phenanthrene	<0.73		6.7	0.73	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Pyrene	<0.44		6.7	0.44	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
3 & 4 Methylphenol	<20		400	20	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
Pyridine	<3.5		100	3.5	ug/Kg		08/19/13 10:44	08/21/13 08:45	1
1,4-Dichlorobenzene	<20		50	20	ug/Kg		08/19/13 10:44	08/21/13 08:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*24 - 110*	*08/19/13 10:44*	*08/21/13 08:45*	*1*
2-Fluorophenol (Surr)	*68*		*24 - 110*	*08/19/13 10:44*	*08/21/13 08:45*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*10 - 110*	*08/19/13 10:44*	*08/21/13 08:45*	*1*
Nitrobenzene-d5 (Surr)	*88*		*20 - 110*	*08/19/13 10:44*	*08/21/13 08:45*	*1*
Phenol-d5 (Surr)	*78*		*26 - 110*	*08/19/13 10:44*	*08/21/13 08:45*	*1*
Terphenyl-d14 (Surr)	*104*		*36 - 110*	*08/19/13 10:44*	*08/21/13 08:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-98019/14-A
Matrix: Solid
Analysis Batch: 98300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	506		ug/Kg		76	35 - 110
bis (2-chloroisopropyl) ether	667	500		ug/Kg		75	29 - 110
2,4,5-Trichlorophenol	667	560		ug/Kg		84	25 - 110
2,4,6-Trichlorophenol	667	563		ug/Kg		84	12 - 110
2,4-Dichlorophenol	667	585		ug/Kg		88	39 - 110
2,4-Dimethylphenol	667	630		ug/Kg		94	29 - 110
2,4-Dinitrophenol	1330	830		ug/Kg		62	10 - 110
2,4-Dinitrotoluene	667	621		ug/Kg		93	48 - 110
2,6-Dinitrotoluene	667	614		ug/Kg		92	45 - 110
2-Chloronaphthalene	667	500		ug/Kg		75	32 - 110
2-Chlorophenol	667	533		ug/Kg		80	37 - 110
2-Methylnaphthalene	667	500		ug/Kg		75	36 - 110
2-Methylphenol	667	555		ug/Kg		83	41 - 110
2-Nitroaniline	667	651		ug/Kg		98	45 - 110
2-Nitrophenol	667	583		ug/Kg		87	34 - 110
3,3'-Dichlorobenzidine	1330	880		ug/Kg		66	28 - 110
3-Nitroaniline	667	550		ug/Kg		82	44 - 110
4,6-Dinitro-2-methylphenol	1330	994		ug/Kg		75	10 - 110
4-Bromophenyl phenyl ether	667	568		ug/Kg		85	39 - 110
4-Chloro-3-methylphenol	667	608		ug/Kg		91	48 - 110
4-Chloroaniline	667	433		ug/Kg		65	30 - 110
4-Chlorophenyl phenyl ether	667	537		ug/Kg		81	40 - 110
4-Nitroaniline	667	534		ug/Kg		80	48 - 110
4-Nitrophenol	1330	1290		ug/Kg		97	28 - 110
Acenaphthene	667	515		ug/Kg		77	38 - 110
Acenaphthylene	667	492		ug/Kg		74	40 - 110
Acetophenone	667	445		ug/Kg		67	40 - 110
Anthracene	667	518		ug/Kg		78	48 - 110
Atrazine	1330	1210		ug/Kg		91	66 - 127
Benzaldehyde	1330	283	*	ug/Kg		21	32 - 110
Benzo[a]anthracene	667	572		ug/Kg		86	50 - 110
Benzo[a]pyrene	667	596		ug/Kg		89	44 - 110
Benzo[b]fluoranthene	667	534		ug/Kg		80	43 - 110
Benzo[g,h,i]perylene	667	608		ug/Kg		91	51 - 110
Benzo[k]fluoranthene	667	572		ug/Kg		86	38 - 105
Bis(2-chloroethoxy)methane	667	546		ug/Kg		82	32 - 110
Bis(2-chloroethyl)ether	667	565		ug/Kg		85	34 - 110
Bis(2-ethylhexyl) phthalate	667	596		ug/Kg		89	50 - 110
Butyl benzyl phthalate	667	580		ug/Kg		87	51 - 110
Caprolactam	1330	1330		ug/Kg		100	44 - 114
Carbazole	667	553		ug/Kg		83	50 - 110
Chrysene	667	563		ug/Kg		84	50 - 110
Dibenz(a,h)anthracene	667	548		ug/Kg		82	51 - 110
Dibenzofuran	667	523		ug/Kg		78	43 - 110
Diethyl phthalate	667	584		ug/Kg		88	52 - 110
Dimethyl phthalate	667	578		ug/Kg		87	50 - 110
Di-n-butyl phthalate	667	558		ug/Kg		84	51 - 110
Di-n-octyl phthalate	667	531		ug/Kg		80	48 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-98019/14-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98300 — **Prep Batch: 98019**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	574		ug/Kg		86	51 - 110
Fluorene	667	512		ug/Kg		77	46 - 110
Hexachlorobenzene	667	575		ug/Kg		86	43 - 110
Hexachlorobutadiene	667	557		ug/Kg		84	29 - 110
Hexachlorocyclopentadiene	667	356		ug/Kg		53	12 - 110
Hexachloroethane	667	560		ug/Kg		84	30 - 110
Indeno[1,2,3-cd]pyrene	667	626		ug/Kg		94	50 - 110
Isophorone	667	519		ug/Kg		78	36 - 110
Naphthalene	667	491		ug/Kg		74	36 - 110
Nitrobenzene	667	603		ug/Kg		90	32 - 110
N-Nitrosodi-n-propylamine	667	582		ug/Kg		87	38 - 110
Pentachlorophenol	1330	826		ug/Kg		62	10 - 110
Phenol	667	555		ug/Kg		83	38 - 110
Phenanthrene	667	523		ug/Kg		79	49 - 110
Pyrene	667	593		ug/Kg		89	49 - 110
3 & 4 Methylphenol	667	565		ug/Kg		85	40 - 110
Pyridine	667	406		ug/Kg		61	22 - 110
1,4-Dichlorobenzene	667	497		ug/Kg		75	33 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*76*		*24 - 110*
2-Fluorophenol (Surr)	*80*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*83*		*10 - 110*
Nitrobenzene-d5 (Surr)	*93*		*20 - 110*
Phenol-d5 (Surr)	*83*		*26 - 110*
Terphenyl-d14 (Surr)	*105*		*36 - 110*

Lab Sample ID: MB 240-98217/6-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98462 — **Prep Batch: 98217**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	<3.5		50	3.5	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
bis (2-chloroisopropyl) ether	<9.5		100	9.5	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,4,5-Trichlorophenol	<25		150	25	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,4,6-Trichlorophenol	<8.9		150	8.9	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,4-Dichlorophenol	<20		150	20	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,4-Dimethylphenol	<20		150	20	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,4-Dinitrophenol	<21		330	21	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,4-Dinitrotoluene	<17		200	17	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2,6-Dinitrotoluene	<21		200	21	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2-Chloronaphthalene	<0.45		50	0.45	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2-Chlorophenol	<8.2		50	8.2	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2-Methylnaphthalene	<0.50		6.7	0.50	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2-Methylphenol	<11		200	11	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2-Nitroaniline	<9.1		200	9.1	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
2-Nitrophenol	<8.3		50	8.3	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
3,3'-Dichlorobenzidine	<18		100	18	ug/Kg		08/20/13 13:00	08/22/13 09:43	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-98217/6-A
Matrix: Solid
Analysis Batch: 98462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	<16		200	16	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4,6-Dinitro-2-methylphenol	<9.2		150	9.2	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4-Bromophenyl phenyl ether	<13		50	13	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4-Chloro-3-methylphenol	<21		150	21	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4-Chloroaniline	<17		150	17	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4-Chlorophenyl phenyl ether	<13		50	13	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4-Nitroaniline	<26		200	26	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
4-Nitrophenol	<17		330	17	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Acenaphthene	<0.76		6.7	0.76	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Acenaphthylene	<0.35		6.7	0.35	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Acetophenone	<9.2		100	9.2	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Anthracene	<0.78		6.7	0.78	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Atrazine	<9.1		200	9.1	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Benzaldehyde	<12		100	12	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Benzo[a]anthracene	<0.63		6.7	0.63	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Benzo[a]pyrene	<0.64		6.7	0.64	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Benzo[b]fluoranthene	<0.59		6.7	0.59	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Benzo[g,h,i]perylene	<0.35		6.7	0.35	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Benzo[k]fluoranthene	<0.68		6.7	0.68	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Bis(2-chloroethoxy)methane	<22		100	22	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Bis(2-chloroethyl)ether	<2.0		100	2.0	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Bis(2-ethylhexyl) phthalate	<19		70	19	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Butyl benzyl phthalate	<10		70	10	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Caprolactam	<37		330	37	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Carbazole	<27		50	27	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Chrysene	<1.1		6.7	1.1	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Dibenz(a,h)anthracene	<0.66		6.7	0.66	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Dibenzofuran	<0.66		50	0.66	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Diethyl phthalate	<16		70	16	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Dimethyl phthalate	<17		70	17	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Di-n-butyl phthalate	16.1	J	70	15	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Di-n-octyl phthalate	<7.9		70	7.9	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Fluoranthene	<0.55		6.7	0.55	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Fluorene	<0.53		6.7	0.53	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Hexachlorobenzene	<2.1		6.7	2.1	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Hexachlorobutadiene	<5.6		50	5.6	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Hexachlorocyclopentadiene	<8.1		330	8.1	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Hexachloroethane	<9.0		50	9.0	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Indeno[1,2,3-cd]pyrene	<0.35		6.7	0.35	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Isophorone	<13		50	13	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Naphthalene	<0.82		6.7	0.82	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Nitrobenzene	<2.2		100	2.2	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
N-Nitrosodi-n-propylamine	<6.3		50	6.3	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Pentachlorophenol	<9.1		150	9.1	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Phenol	<7.3		50	7.3	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Phenanthrene	<0.73		6.7	0.73	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
Pyrene	<0.44		6.7	0.44	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
3 & 4 Methylphenol	<20		400	20	ug/Kg		08/20/13 13:00	08/22/13 09:43	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-98217/6-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98462 — **Prep Batch: 98217**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	<3.5		100	3.5	ug/Kg		08/20/13 13:00	08/22/13 09:43	1
1,4-Dichlorobenzene	<20		50	20	ug/Kg		08/20/13 13:00	08/22/13 09:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*24 - 110*	*08/20/13 13:00*	*08/22/13 09:43*	*1*
2-Fluorophenol (Surr)	*60*		*24 - 110*	*08/20/13 13:00*	*08/22/13 09:43*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 110*	*08/20/13 13:00*	*08/22/13 09:43*	*1*
Nitrobenzene-d5 (Surr)	*66*		*20 - 110*	*08/20/13 13:00*	*08/22/13 09:43*	*1*
Phenol-d5 (Surr)	*66*		*26 - 110*	*08/20/13 13:00*	*08/22/13 09:43*	*1*
Terphenyl-d14 (Surr)	*94*		*36 - 110*	*08/20/13 13:00*	*08/22/13 09:43*	*1*

Lab Sample ID: LCS 240-98217/7-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98462 — **Prep Batch: 98217**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	496		ug/Kg		74	35 - 110
bis (2-chloroisopropyl) ether	667	493		ug/Kg		74	29 - 110
2,4,5-Trichlorophenol	667	506		ug/Kg		76	25 - 110
2,4,6-Trichlorophenol	667	485		ug/Kg		73	12 - 110
2,4-Dichlorophenol	667	537		ug/Kg		81	39 - 110
2,4-Dimethylphenol	667	587		ug/Kg		88	29 - 110
2,4-Dinitrophenol	1330	575		ug/Kg		43	10 - 110
2,4-Dinitrotoluene	667	557		ug/Kg		84	48 - 110
2,6-Dinitrotoluene	667	531		ug/Kg		80	45 - 110
2-Chloronaphthalene	667	499		ug/Kg		75	32 - 110
2-Chlorophenol	667	508		ug/Kg		76	37 - 110
2-Methylnaphthalene	667	503		ug/Kg		75	36 - 110
2-Methylphenol	667	520		ug/Kg		78	41 - 110
2-Nitroaniline	667	543		ug/Kg		81	45 - 110
2-Nitrophenol	667	526		ug/Kg		79	34 - 110
3,3'-Dichlorobenzidine	1330	983		ug/Kg		74	28 - 110
3-Nitroaniline	667	505		ug/Kg		76	44 - 110
4,6-Dinitro-2-methylphenol	1330	865		ug/Kg		65	10 - 110
4-Bromophenyl phenyl ether	667	560		ug/Kg		84	39 - 110
4-Chloro-3-methylphenol	667	555		ug/Kg		83	48 - 110
4-Chloroaniline	667	432		ug/Kg		65	30 - 110
4-Chlorophenyl phenyl ether	667	518		ug/Kg		78	40 - 110
4-Nitroaniline	667	558		ug/Kg		84	48 - 110
4-Nitrophenol	1330	1100		ug/Kg		82	28 - 110
Acenaphthene	667	505		ug/Kg		76	38 - 110
Acenaphthylene	667	486		ug/Kg		73	40 - 110
Acetophenone	667	417		ug/Kg		63	40 - 110
Anthracene	667	566		ug/Kg		85	48 - 110
Atrazine	1330	1120		ug/Kg		84	66 - 127
Benzaldehyde	1330	633		ug/Kg		48	32 - 110
Benzo[a]anthracene	667	564		ug/Kg		85	50 - 110
Benzo[a]pyrene	667	583		ug/Kg		87	44 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-98217/7-A
Matrix: Solid
Analysis Batch: 98462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	667	590		ug/Kg		88	43 - 110
Benzo[g,h,i]perylene	667	588		ug/Kg		88	51 - 110
Benzo[k]fluoranthene	667	567		ug/Kg		85	38 - 105
Bis(2-chloroethoxy)methane	667	514		ug/Kg		77	32 - 110
Bis(2-chloroethyl)ether	667	495		ug/Kg		74	34 - 110
Bis(2-ethylhexyl) phthalate	667	606		ug/Kg		91	50 - 110
Butyl benzyl phthalate	667	602		ug/Kg		90	51 - 110
Caprolactam	1330	1270		ug/Kg		95	44 - 114
Carbazole	667	603		ug/Kg		90	50 - 110
Chrysene	667	563		ug/Kg		84	50 - 110
Dibenz(a,h)anthracene	667	509		ug/Kg		76	51 - 110
Dibenzofuran	667	509		ug/Kg		76	43 - 110
Diethyl phthalate	667	528		ug/Kg		79	52 - 110
Dimethyl phthalate	667	520		ug/Kg		78	50 - 110
Di-n-butyl phthalate	667	596		ug/Kg		89	51 - 110
Di-n-octyl phthalate	667	527		ug/Kg		79	48 - 110
Fluoranthene	667	583		ug/Kg		87	51 - 110
Fluorene	667	508		ug/Kg		76	46 - 110
Hexachlorobenzene	667	532		ug/Kg		80	43 - 110
Hexachlorobutadiene	667	488		ug/Kg		73	29 - 110
Hexachlorocyclopentadiene	667	366		ug/Kg		55	12 - 110
Hexachloroethane	667	459		ug/Kg		69	30 - 110
Indeno[1,2,3-cd]pyrene	667	592		ug/Kg		89	50 - 110
Isophorone	667	453		ug/Kg		68	36 - 110
Naphthalene	667	499		ug/Kg		75	36 - 110
Nitrobenzene	667	506		ug/Kg		76	32 - 110
N-Nitrosodi-n-propylamine	667	513		ug/Kg		77	38 - 110
Pentachlorophenol	1330	892		ug/Kg		67	10 - 110
Phenol	667	536		ug/Kg		80	38 - 110
Phenanthrene	667	555		ug/Kg		83	49 - 110
Pyrene	667	567		ug/Kg		85	49 - 110
3 & 4 Methylphenol	667	526		ug/Kg		79	40 - 110
Pyridine	667	352		ug/Kg		53	22 - 110
1,4-Dichlorobenzene	667	481		ug/Kg		72	33 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*24 - 110*
2-Fluorophenol (Surr)	*75*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*72*		*10 - 110*
Nitrobenzene-d5 (Surr)	*76*		*20 - 110*
Phenol-d5 (Surr)	*77*		*26 - 110*
Terphenyl-d14 (Surr)	*98*		*36 - 110*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-98018/16-A
Matrix: Solid
Analysis Batch: 98456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<21		33	21	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1221	<16		33	16	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1232	<14		33	14	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1242	<13		33	13	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1248	<17		33	17	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1254	<17		33	17	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1260	<17		33	17	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1262	<27		33	27	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Aroclor-1268	<14		33	14	ug/Kg		08/19/13 10:38	08/22/13 07:33	1
Polychlorinated biphenyls, Total	<13		33	13	ug/Kg		08/19/13 10:38	08/22/13 07:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*29 - 151*	*08/19/13 10:38*	*08/22/13 07:33*	*1*
DCB Decachlorobiphenyl	*76*		*14 - 163*	*08/19/13 10:38*	*08/22/13 07:33*	*1*

Lab Sample ID: LCS 240-98018/17-A
Matrix: Solid
Analysis Batch: 98456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	288		ug/Kg		86	62 - 120
Aroclor-1260	333	288		ug/Kg		86	56 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*174*	*X*	*29 - 151*
DCB Decachlorobiphenyl	*89*		*14 - 163*

Lab Sample ID: MB 240-98211/6-A
Matrix: Solid
Analysis Batch: 98417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	<21		33	21	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1221	<16		33	16	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1232	<14		33	14	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1242	<13		33	13	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1248	<17		33	17	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1254	<17		33	17	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1260	<17		33	17	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1262	<27		33	27	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Aroclor-1268	<14		33	14	ug/Kg		08/20/13 12:50	08/21/13 18:16	1
Polychlorinated biphenyls, Total	<13		33	13	ug/Kg		08/20/13 12:50	08/21/13 18:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*29 - 151*	*08/20/13 12:50*	*08/21/13 18:16*	*1*
DCB Decachlorobiphenyl	*79*		*14 - 163*	*08/20/13 12:50*	*08/21/13 18:16*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-98211/7-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98417 — **Prep Batch: 98211**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	296		ug/Kg		89	62 - 120
Aroclor-1260	333	316		ug/Kg		95	56 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*65*		*29 - 151*
DCB Decachlorobiphenyl	*82*		*14 - 163*

Method: 6010B - Metals (ICP)

Lab Sample ID: LB 240-98259/1-D LB — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98641 — **Prep Batch: 98344**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00159	J	10	0.00067	mg/L		08/21/13 09:58	08/22/13 14:41	1
Cadmium	<0.00066		0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 14:41	1
Chromium	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 14:41	1
Arsenic	<0.0032		0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 14:41	1
Lead	<0.0019		0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 14:41	1
Selenium	<0.0041		0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 14:41	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 14:41	1

Lab Sample ID: MB 240-98344/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98641 — **Prep Batch: 98344**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00115	J	10	0.00067	mg/L		08/21/13 09:58	08/22/13 14:45	1
Cadmium	<0.00066		0.10	0.00066	mg/L		08/21/13 09:58	08/22/13 14:45	1
Chromium	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 14:45	1
Arsenic	<0.0032		0.50	0.0032	mg/L		08/21/13 09:58	08/22/13 14:45	1
Lead	<0.0019		0.50	0.0019	mg/L		08/21/13 09:58	08/22/13 14:45	1
Selenium	<0.0041		0.25	0.0041	mg/L		08/21/13 09:58	08/22/13 14:45	1
Silver	<0.0022		0.50	0.0022	mg/L		08/21/13 09:58	08/22/13 14:45	1

Lab Sample ID: LCS 240-98344/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98641 — **Prep Batch: 98344**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	1.99	J	mg/L		99	50 - 150
Cadmium	0.0500	0.0525	J	mg/L		105	50 - 150
Chromium	0.200	0.205	J	mg/L		102	50 - 150
Arsenic	2.00	2.20		mg/L		110	50 - 150
Lead	0.500	0.480	J	mg/L		96	50 - 150
Selenium	2.00	2.18		mg/L		109	50 - 150
Silver	0.0500	0.0534	J	mg/L		107	50 - 150

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 240-97357/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 97764 — **Prep Batch: 97357**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1.34	J	200	0.67	ug/L		08/14/13 08:01	08/15/13 11:12	1
Cadmium	<0.66		2.0	0.66	ug/L		08/14/13 08:01	08/15/13 11:12	1
Chromium	<2.2		5.0	2.2	ug/L		08/14/13 08:01	08/15/13 11:12	1
Arsenic	<3.2		10	3.2	ug/L		08/14/13 08:01	08/15/13 11:12	1
Lead	<1.9		3.0	1.9	ug/L		08/14/13 08:01	08/15/13 11:12	1
Selenium	<4.1		5.0	4.1	ug/L		08/14/13 08:01	08/15/13 11:12	1
Silver	<2.2		5.0	2.2	ug/L		08/14/13 08:01	08/15/13 11:12	1

Lab Sample ID: LCS 240-97357/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 97764 — **Prep Batch: 97357**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2000	2070		ug/L		103	80 - 120
Cadmium	50.0	53.1		ug/L		106	80 - 120
Chromium	200	205		ug/L		103	80 - 120
Arsenic	2000	2080		ug/L		104	80 - 120
Lead	500	493		ug/L		99	80 - 120
Selenium	2000	2100		ug/L		105	80 - 120
Silver	50.0	54.8		ug/L		110	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-97360/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 97481 — **Prep Batch: 97360**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.12		0.20	0.12	ug/L		08/14/13 09:00	08/14/13 12:07	1

Lab Sample ID: LCS 240-97360/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 97481 — **Prep Batch: 97360**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.40		ug/L		108	81 - 123

Lab Sample ID: LB 240-98259/1-E LB — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98583 — **Prep Batch: 98348**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:13	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 240-98348/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98583 — **Prep Batch: 98348**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00012		0.0020	0.00012	mg/L		08/21/13 14:20	08/22/13 11:15	1

Lab Sample ID: LCS 240-98348/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 98583 — **Prep Batch: 98348**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00531		mg/L		106	50 - 150

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

GC/MS Semi VOA

Prep Batch: 97238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-7	SP-EB-ISM-01	Total/NA	Water	3520C	
LCS 240-97238/17-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-97238/16-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 97595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-7	SP-EB-ISM-01	Total/NA	Water	8270C	97238
MB 240-97238/16-A	Method Blank	Total/NA	Water	8270C	97238

Analysis Batch: 97775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-97238/17-A	Lab Control Sample	Total/NA	Water	8270C	97238

Prep Batch: 98019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	3540C	98026
LCS 240-98019/14-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-98019/13-A	Method Blank	Total/NA	Solid	3540C	

ISM Prep Batch: 98026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-2 - RA	SP-02-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-2	SP-02-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-3 - RA	SP-03-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-3	SP-03-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-4	SP-04-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-5	SP-05-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-6	SP-06-ISM-01	Total/NA	Solid	Increment, Prep	

Prep Batch: 98217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-2 - RA	SP-02-ISM-01	Total/NA	Solid	3540C	98026
240-27737-2	SP-02-ISM-01	Total/NA	Solid	3540C	98026
240-27737-3 - RA	SP-03-ISM-01	Total/NA	Solid	3540C	98026
240-27737-3	SP-03-ISM-01	Total/NA	Solid	3540C	98026
240-27737-4	SP-04-ISM-01	Total/NA	Solid	3540C	98026
240-27737-5	SP-05-ISM-01	Total/NA	Solid	3540C	98026
240-27737-6	SP-06-ISM-01	Total/NA	Solid	3540C	98026
LCS 240-98217/7-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-98217/6-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 98300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	8270C	98019
LCS 240-98019/14-A	Lab Control Sample	Total/NA	Solid	8270C	98019
MB 240-98019/13-A	Method Blank	Total/NA	Solid	8270C	98019

Analysis Batch: 98462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-2	SP-02-ISM-01	Total/NA	Solid	8270C	98217

GC/MS Semi VOA (Continued)

Analysis Batch: 98462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-3	SP-03-ISM-01	Total/NA	Solid	8270C	98217
240-27737-4	SP-04-ISM-01	Total/NA	Solid	8270C	98217
240-27737-5	SP-05-ISM-01	Total/NA	Solid	8270C	98217
240-27737-6	SP-06-ISM-01	Total/NA	Solid	8270C	98217
LCS 240-98217/7-A	Lab Control Sample	Total/NA	Solid	8270C	98217
MB 240-98217/6-A	Method Blank	Total/NA	Solid	8270C	98217

Analysis Batch: 98679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-2 - RA	SP-02-ISM-01	Total/NA	Solid	8270C	98217
240-27737-3 - RA	SP-03-ISM-01	Total/NA	Solid	8270C	98217

GC Semi VOA

Prep Batch: 98018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	3540C	98026
LCS 240-98018/17-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-98018/16-A	Method Blank	Total/NA	Solid	3540C	

ISM Prep Batch: 98026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-2	SP-02-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-3	SP-03-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-4	SP-04-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-5	SP-05-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-6	SP-06-ISM-01	Total/NA	Solid	Increment, Prep	

Prep Batch: 98211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-2	SP-02-ISM-01	Total/NA	Solid	3540C	98026
240-27737-3	SP-03-ISM-01	Total/NA	Solid	3540C	98026
240-27737-4	SP-04-ISM-01	Total/NA	Solid	3540C	98026
240-27737-5	SP-05-ISM-01	Total/NA	Solid	3540C	98026
240-27737-6	SP-06-ISM-01	Total/NA	Solid	3540C	98026
LCS 240-98211/7-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-98211/6-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 98417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-2	SP-02-ISM-01	Total/NA	Solid	8082	98211
240-27737-3	SP-03-ISM-01	Total/NA	Solid	8082	98211
240-27737-4	SP-04-ISM-01	Total/NA	Solid	8082	98211
240-27737-5	SP-05-ISM-01	Total/NA	Solid	8082	98211
240-27737-6	SP-06-ISM-01	Total/NA	Solid	8082	98211
LCS 240-98211/7-A	Lab Control Sample	Total/NA	Solid	8082	98211
MB 240-98211/6-A	Method Blank	Total/NA	Solid	8082	98211

GC Semi VOA (Continued)

Analysis Batch: 98456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	8082	98018
LCS 240-98018/17-A	Lab Control Sample	Total/NA	Solid	8082	98018
MB 240-98018/16-A	Method Blank	Total/NA	Solid	8082	98018

Metals

Prep Batch: 97357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-7	SP-EB-ISM-01	Total Recoverable	Water	3005A	
LCS 240-97357/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-97357/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 97360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-7	SP-EB-ISM-01	Total/NA	Water	7470A	
LCS 240-97360/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-97360/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 97481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-7	SP-EB-ISM-01	Total/NA	Water	7470A	97360
LCS 240-97360/2-A	Lab Control Sample	Total/NA	Water	7470A	97360
MB 240-97360/1-A	Method Blank	Total/NA	Water	7470A	97360

Analysis Batch: 97764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-7	SP-EB-ISM-01	Total Recoverable	Water	6010B	97357
LCS 240-97357/2-A	Lab Control Sample	Total Recoverable	Water	6010B	97357
MB 240-97357/1-A	Method Blank	Total Recoverable	Water	6010B	97357

ISM Prep Batch: 98026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-2	SP-02-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-3	SP-03-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-4	SP-04-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-5	SP-05-ISM-01	Total/NA	Solid	Increment, Prep	
240-27737-6	SP-06-ISM-01	Total/NA	Solid	Increment, Prep	

Leach Batch: 98259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	1311	98026
240-27737-2	SP-02-ISM-01	Total/NA	Solid	1311	98026
240-27737-3	SP-03-ISM-01	Total/NA	Solid	1311	98026
240-27737-4	SP-04-ISM-01	Total/NA	Solid	1311	98026
240-27737-5	SP-05-ISM-01	Total/NA	Solid	1311	98026
240-27737-6	SP-06-ISM-01	Total/NA	Solid	1311	98026
LB 240-98259/1-D LB	Method Blank	Total/NA	Solid	1311	
LB 240-98259/1-E LB	Method Blank	Total/NA	Solid	1311	

Metals (Continued)

Prep Batch: 98344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	3010A	98259
240-27737-2	SP-02-ISM-01	Total/NA	Solid	3010A	98259
240-27737-3	SP-03-ISM-01	Total/NA	Solid	3010A	98259
240-27737-4	SP-04-ISM-01	Total/NA	Solid	3010A	98259
240-27737-5	SP-05-ISM-01	Total/NA	Solid	3010A	98259
240-27737-6	SP-06-ISM-01	Total/NA	Solid	3010A	98259
LB 240-98259/1-D LB	Method Blank	Total/NA	Solid	3010A	98259
LCS 240-98344/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 240-98344/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 98348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	7470A	98259
240-27737-2	SP-02-ISM-01	Total/NA	Solid	7470A	98259
240-27737-3	SP-03-ISM-01	Total/NA	Solid	7470A	98259
240-27737-4	SP-04-ISM-01	Total/NA	Solid	7470A	98259
240-27737-5	SP-05-ISM-01	Total/NA	Solid	7470A	98259
240-27737-6	SP-06-ISM-01	Total/NA	Solid	7470A	98259
LB 240-98259/1-E LB	Method Blank	Total/NA	Solid	7470A	98259
LCS 240-98348/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 240-98348/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 98583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	7470A	98348
240-27737-2	SP-02-ISM-01	Total/NA	Solid	7470A	98348
240-27737-3	SP-03-ISM-01	Total/NA	Solid	7470A	98348
240-27737-4	SP-04-ISM-01	Total/NA	Solid	7470A	98348
240-27737-5	SP-05-ISM-01	Total/NA	Solid	7470A	98348
240-27737-6	SP-06-ISM-01	Total/NA	Solid	7470A	98348
LB 240-98259/1-E LB	Method Blank	Total/NA	Solid	7470A	98348
LCS 240-98348/3-A	Lab Control Sample	Total/NA	Solid	7470A	98348
MB 240-98348/2-A	Method Blank	Total/NA	Solid	7470A	98348

Analysis Batch: 98641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	6010B	98344
240-27737-1	SP-01-ISM-01	Total/NA	Solid	6010B	98344
240-27737-2	SP-02-ISM-01	Total/NA	Solid	6010B	98344
240-27737-3	SP-03-ISM-01	Total/NA	Solid	6010B	98344
240-27737-4	SP-04-ISM-01	Total/NA	Solid	6010B	98344
240-27737-5	SP-05-ISM-01	Total/NA	Solid	6010B	98344
240-27737-6	SP-06-ISM-01	Total/NA	Solid	6010B	98344
LB 240-98259/1-D LB	Method Blank	Total/NA	Solid	6010B	98344
LCS 240-98344/3-A	Lab Control Sample	Total/NA	Solid	6010B	98344
MB 240-98344/2-A	Method Blank	Total/NA	Solid	6010B	98344

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

General Chemistry

Analysis Batch: 98382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-27737-1	SP-01-ISM-01	Total/NA	Solid	Moisture	
240-27737-2	SP-02-ISM-01	Total/NA	Solid	Moisture	
240-27737-3	SP-03-ISM-01	Total/NA	Solid	Moisture	
240-27737-4	SP-04-ISM-01	Total/NA	Solid	Moisture	
240-27737-5	SP-05-ISM-01	Total/NA	Solid	Moisture	
240-27737-6	SP-06-ISM-01	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-01-ISM-01

Lab Sample ID: 240-27737-1

Date Collected: 08/05/13 15:20
Matrix: Solid
Date Received: 08/08/13 09:00
Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98019	08/19/13 11:20	MPM	TAL CAN
Total/NA	Analysis	8270C		6.667	98300	08/21/13 11:40	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98018	08/19/13 10:38	KEC	TAL CAN
Total/NA	Analysis	8082		5	98456	08/22/13 07:18	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	7470A			98348	08/21/13 14:20	DEE	TAL CAN
Total/NA	Analysis	7470A		1	98583	08/22/13 11:44	ADS	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Analysis	6010B		2	98641	08/22/13 20:43	RKT	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	3010A			98344	08/21/13 09:58	DEE	TAL CAN
Total/NA	Analysis	6010B		1	98641	08/22/13 16:06	RKT	TAL CAN
Total/NA	Analysis	Moisture		1	98382	08/21/13 11:57	NJE	TAL CAN

Client Sample ID: SP-02-ISM-01

Lab Sample ID: 240-27737-2

Date Collected: 08/06/13 10:10
Matrix: Solid
Date Received: 08/08/13 09:00
Percent Solids: 99.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C		1	98462	08/22/13 10:31	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep	RA		98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C	RA		98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C	RA	2.5	98679	08/23/13 13:39	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98211	08/20/13 12:50	KEC	TAL CAN
Total/NA	Analysis	8082		10	98417	08/21/13 17:05	LSH	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	7470A			98348	08/21/13 14:20	DEE	TAL CAN
Total/NA	Analysis	7470A		1	98583	08/22/13 11:45	ADS	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	3010A			98344	08/21/13 09:58	DEE	TAL CAN
Total/NA	Analysis	6010B		1	98641	08/22/13 16:10	RKT	TAL CAN
Total/NA	Analysis	Moisture		1	98382	08/21/13 11:57	NJE	TAL CAN

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-03-ISM-01

Lab Sample ID: 240-27737-3

Date Collected: 08/06/13 15:17
Date Received: 08/08/13 09:00

Matrix: Solid
Percent Solids: 98.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C		1	98462	08/22/13 10:54	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep	RA		98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C	RA		98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C	RA	4	98679	08/23/13 14:03	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98211	08/20/13 12:50	KEC	TAL CAN
Total/NA	Analysis	8082		1	98417	08/21/13 17:19	LSH	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	7470A			98348	08/21/13 14:20	DEE	TAL CAN
Total/NA	Analysis	7470A		1	98583	08/22/13 11:47	ADS	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	3010A			98344	08/21/13 09:58	DEE	TAL CAN
Total/NA	Analysis	6010B		1	98641	08/22/13 16:22	RKT	TAL CAN
Total/NA	Analysis	Moisture		1	98382	08/21/13 11:57	NJE	TAL CAN

Client Sample ID: SP-04-ISM-01

Lab Sample ID: 240-27737-4

Date Collected: 08/06/13 16:54
Date Received: 08/08/13 09:00

Matrix: Solid
Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C		1	98462	08/22/13 12:06	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98211	08/20/13 12:50	KEC	TAL CAN
Total/NA	Analysis	8082		1	98417	08/21/13 17:33	LSH	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	7470A			98348	08/21/13 14:20	DEE	TAL CAN
Total/NA	Analysis	7470A		1	98583	08/22/13 11:49	ADS	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	3010A			98344	08/21/13 09:58	DEE	TAL CAN
Total/NA	Analysis	6010B		1	98641	08/22/13 16:27	RKT	TAL CAN
Total/NA	Analysis	Moisture		1	98382	08/21/13 11:57	NJE	TAL CAN

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-05-ISM-01

Lab Sample ID: 240-27737-5

Date Collected: 08/07/13 10:40
Matrix: Solid
Date Received: 08/08/13 09:00
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C		1	98462	08/22/13 11:18	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98211	08/20/13 12:50	KEC	TAL CAN
Total/NA	Analysis	8082		1	98417	08/21/13 17:48	LSH	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	7470A			98348	08/21/13 14:20	DEE	TAL CAN
Total/NA	Analysis	7470A		1	98583	08/22/13 11:51	ADS	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	3010A			98344	08/21/13 09:58	DEE	TAL CAN
Total/NA	Analysis	6010B		1	98641	08/22/13 16:31	RKT	TAL CAN
Total/NA	Analysis	Moisture		1	98382	08/21/13 11:57	NJE	TAL CAN

Client Sample ID: SP-06-ISM-01

Lab Sample ID: 240-27737-6

Date Collected: 08/07/13 11:45
Matrix: Solid
Date Received: 08/08/13 09:00
Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98217	08/20/13 13:00	KEC	TAL CAN
Total/NA	Analysis	8270C		1	98462	08/22/13 11:42	JMG	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Prep	3540C			98211	08/20/13 12:50	KEC	TAL CAN
Total/NA	Analysis	8082		1	98417	08/21/13 18:02	LSH	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	7470A			98348	08/21/13 14:20	DEE	TAL CAN
Total/NA	Analysis	7470A		1	98583	08/22/13 11:54	ADS	TAL CAN
Total/NA	ISM Prep	Increment, Prep			98026	08/08/13 10:00	DRJ	TAL CAN
Total/NA	Leach	1311			98259	08/20/13 15:50	JS1	TAL CAN
Total/NA	Prep	3010A			98344	08/21/13 09:58	DEE	TAL CAN
Total/NA	Analysis	6010B		1	98641	08/22/13 16:35	RKT	TAL CAN
Total/NA	Analysis	Moisture		1	98382	08/21/13 11:57	NJE	TAL CAN

Client Sample ID: SP-EB-ISM-01

Lab Sample ID: 240-27737-7

Date Collected: 08/06/13 10:13
Matrix: Water
Date Received: 08/08/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			97238	08/13/13 10:49	SDE	TAL CAN
Total/NA	Analysis	8270C		1	97595	08/15/13 13:01	JMG	TAL CAN

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Client Sample ID: SP-EB-ISM-01

Lab Sample ID: 240-27737-7

Date Collected: 08/06/13 10:13

Matrix: Water

Date Received: 08/08/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			97360	08/14/13 09:00	LPM	TAL CAN
Total/NA	Analysis	7470A		1	97481	08/14/13 12:22	ADS	TAL CAN
Total Recoverable	Prep	3005A			97357	08/14/13 08:01	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	97764	08/15/13 11:40	RKT	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Golder Associates Inc.
Project/Site: Satralloy - Pile Sampling

TestAmerica Job ID: 240-27737-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13 *
Texas	NELAP	6		08-31-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Bob Ireson, Eric Hoying, Jamie Bailey, Diane Crawford	Lab PM: Brooks, Kris M - (330) 966-9790	Carrier Tracking No(s): TEST AMERICA DRIVER	COC No: 240-9122-3944.1
Client Contact: Bob Ireson	Phone: 1-614-899-9288	E-Mail: kris.brooks@testamericainc.com		Page: Page 1 of 1
Company: Golder Associates Inc.				Job #:
Address: 2600 Tiller Lane Suite C	Due Date Requested:			
City: Columbus	TAT Requested (days): Normal			
State, Zip: OH, 43231				
Phone: (614) 899-9288	PO #: Purchase Order not required			
Email: bob_ireson@golder.com	WO #:			
Project Name: Satralloy - Gary Smith Pile Sampling	Project #: 12393309.300			
Site: Mingo Junction, Ohio	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TCLP Metals	SVOC	PCB	RCRA Metals	ISM Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D			
SP-01-ISM-01	8/5/13	15:20	ISM	S			X	X	X		X		ISM PREP PRIOR TO ANALYSIS
SP-02-ISM-01	8/6/13	10:10	ISM	S			X	X	X		X		
SP-03-ISM-01	8/6/13	15:17	ISM	S			X	X	X		X		
SP-04-ISM-01	8/6/13	16:54	ISM	S			X	X	X		X		
SP-05-ISM-01	8/7/13	10:40	ISM	S			X	X	X		X		
SP-06-ISM-01	8/7/13	11:45	ISM	S			X	X	X		X		
SP-EB-ISM-01	8/6/13	10:13	ISM	W				X	X	X			

240-27737 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
D. Ronson	8/7/13 – 1447	Golder	Test America Canton	LH 14:47	
			Lance Feustman	8-7-13 ~~1550~~	TAC
Lance Heul	8/7/13 515		Donald Olem	8-8-13 ~~1447~~	TA

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 9:00am

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 277737

Client Golder Site Name

Cooler unpacked by: Wesley A. Green

Cooler Received on 8-7-13 Opened on 8-8-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Multi Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other Paper

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM KMB Date 8/8/13 by AM via Verbal Voice Mail Other Email
Concerning #14

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AM

Received 4x40ml trip blanks not on COC. 00 8-8-13

Sample ID SP-FB-TSM-01 Received 1xL for SVOC + PCB.

Received Sample ID Rinsate (3x40ml) 8/7/13 @ 14:00 not on COC. Will log.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 27737

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	8	2.0	2.0	ICE
Box		21.2	21.2	NA
		20.8	20.8	
		24.0	24.0	
		20.2	20.2	
		21.8	21.8	
		22.1	22.1	

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