

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-30302-1

Client Project/Site: Satralloy Industrial SWPPP

Revision: 1

For:

Golder Associates Inc.

1335 Dublin Road

Suite 126-D

Columbus, Ohio 43215

Attn: Mr. Bob Ireson



Authorized for release by:

10/28/2013 2:06:44 PM

Kris Brooks, Project Manager II

(330)966-9790

kris.brooks@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

1

2

3

4

5

6

7

8

9

10

11

12

13

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	10
QC Sample Results	19
QC Association Summary	22
Lab Chronicle	24
Certification Summary	27
Chain of Custody	28



Definitions/Glossary

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)
Dil Fac	Dilution Factor
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)

Case Narrative

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Job ID: 240-30302-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE
Revised
Client: Golder Associates Inc.

Project: Satralloy Industrial SWPP

Report Number: 240-30302-1

Revised 10-28-13: This report has been revised to update the project name and sample ID DC02D to SC02D.

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 10/17/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.4 C.

Sample IDs were updated at the clients request to the following:

SC-1 = SC01D

SC-2 = SC02D

#4 = GC04D

#5 = GC05D

#6 = GC06D

#9 = GC09D

FD = GCFD

Upstream = US01

Downstream = DS01

Case Narrative

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Job ID: 240-30302-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

TOTAL RECOVERABLE METALS (ICPMS)

Samples US01 (240-30302-1), SC01D (240-30302-2), SC02D (240-30302-3), GC09D (240-30302-4), GC06D (240-30302-5), GC05D (240-30302-6), GC04D (240-30302-7), GC04D (240-30302-8) and DS01 (240-30302-9) were analyzed for total recoverable metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 10/18/2013 and analyzed on 10/21/2013.

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

TOTAL DISSOLVED SOLIDS

Samples US01 (240-30302-1), SC01D (240-30302-2), SC02D (240-30302-3), GC09D (240-30302-4), GC06D (240-30302-5), GC05D (240-30302-6), GC04D (240-30302-7), GC04D (240-30302-8) and DS01 (240-30302-9) were analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 10/18/2013 and 10/22/2013.

Constant TDS weight was not achieved after 3 drying cycles for the following samples: SC02D (240-30302-3) and GC05D (240-30302-6).

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

TOTAL SUSPENDED SOLIDS

Samples US01 (240-30302-1), SC01D (240-30302-2), SC02D (240-30302-3), GC09D (240-30302-4), GC06D (240-30302-5), GC05D (240-30302-6), GC04D (240-30302-7), GC04D (240-30302-8) and DS01 (240-30302-9) were analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 10/18/2013, 10/21/2013 and 10/22/2013.

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

HEXAVALENT CHROMIUM

Samples US01 (240-30302-1), SC01D (240-30302-2), SC02D (240-30302-3), GC09D (240-30302-4), GC06D (240-30302-5), GC05D (240-30302-6), GC04D (240-30302-7), GC04D (240-30302-8) and DS01 (240-30302-9) were analyzed for hexavalent chromium in accordance with SM 3500 CR D. The samples were analyzed on 10/17/2013.

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

PH

Samples US01 (240-30302-1), SC01D (240-30302-2), SC02D (240-30302-3), GC09D (240-30302-4), GC06D (240-30302-5), GC05D (240-30302-6), GC04D (240-30302-7), GC04D (240-30302-8) and DS01 (240-30302-9) were analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed on 10/17/2013.

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

Method Summary

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CAN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CAN
SM 3500 CR D	Chromium, Hexavalent	SM	TAL CAN
SM 4500 H+ B	pH	SM	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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 Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-30302-1	US01	Water	10/16/13 14:30	10/17/13 09:30
240-30302-2	SC01D	Water	10/16/13 14:50	10/17/13 09:30
240-30302-3	SC02D	Water	10/16/13 15:16	10/17/13 09:30
240-30302-4	GC09D	Water	10/16/13 15:30	10/17/13 09:30
240-30302-5	GC06D	Water	10/16/13 15:38	10/17/13 09:30
240-30302-6	GC05D	Water	10/16/13 15:42	10/17/13 09:30
240-30302-7	GCFD	Water	10/16/13 15:45	10/17/13 09:30
240-30302-8	GC04D	Water	10/16/13 15:51	10/17/13 09:30
240-30302-9	DS01	Water	10/16/13 16:09	10/17/13 09:30

Detection Summary

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: US01

Lab Sample ID: 240-30302-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	630		10	10	mg/L	1		SM 2540C	Total/NA
pH	8.43	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: SC01D

Lab Sample ID: 240-30302-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	30		2.0	2.0	ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	190		10	10	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	6.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Cr (VI)	0.031		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	8.44	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: SC02D

Lab Sample ID: 240-30302-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	36		2.0	2.0	ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	470		20	20	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	4.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Cr (VI)	0.050		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	12.3	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: GC09D

Lab Sample ID: 240-30302-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	60		2.0	2.0	ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	6.0		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Cr (VI)	0.068		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	8.34	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: GC06D

Lab Sample ID: 240-30302-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	220		2.0	2.0	ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	870		10	10	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	57		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Cr (VI)	0.15		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	8.65	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: GC05D

Lab Sample ID: 240-30302-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	320		2.0	2.0	ug/L	1		200.8	Total Recoverable
Total Dissolved Solids	540		10	10	mg/L	1		SM 2540C	Total/NA
Cr (VI)	0.28		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	9.41	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GCFD

Lab Sample ID: 240-30302-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	310		2.0	2.0	ug/L	1		200.8	Total
Total Dissolved Solids	550		10	10	mg/L	1		SM 2540C	Recoverable Total/NA
Cr (VI)	0.32		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	9.40	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: GC04D

Lab Sample ID: 240-30302-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	28		2.0	2.0	ug/L	1		200.8	Total
Total Dissolved Solids	860		10	10	mg/L	1		SM 2540C	Recoverable Total/NA
Cr (VI)	0.027		0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	8.00	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: DS01

Lab Sample ID: 240-30302-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1100		10	10	mg/L	1		SM 2540C	Total/NA
Cr (VI)	0.0048	J	0.010	0.0020	mg/L	1		SM 3500 CR D	Total/NA
pH	8.64	HF	0.100	0.100	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: US01

Date Collected: 10/16/13 14:30

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-1

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<2.0		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	630		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/18/13 09:10	1
Cr (VI)	<0.0020		0.010	0.0020	mg/L			10/17/13 12:12	1
pH	8.43	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: SC01D

Date Collected: 10/16/13 14:50

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-2

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	30		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	6.0		4.0	4.0	mg/L			10/18/13 09:10	1
Cr (VI)	0.031		0.010	0.0020	mg/L			10/17/13 12:13	1
pH	8.44	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: SC02D

Date Collected: 10/16/13 15:16

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-3

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	36		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	470		20	20	mg/L			10/22/13 10:33	1
Total Suspended Solids	4.0		4.0	4.0	mg/L			10/18/13 09:10	1
Cr (VI)	0.050		0.010	0.0020	mg/L			10/17/13 12:13	1
pH	12.3	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GC09D

Lab Sample ID: 240-30302-4

Date Collected: 10/16/13 15:30

Matrix: Water

Date Received: 10/17/13 09:30

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	60		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	6.0		4.0	4.0	mg/L			10/18/13 09:10	1
Cr (VI)	0.068		0.010	0.0020	mg/L			10/17/13 12:14	1
pH	8.34	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GC06D

Date Collected: 10/16/13 15:38

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-5

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	220		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	870		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	57		4.0	4.0	mg/L			10/21/13 09:34	1
Cr (VI)	0.15		0.010	0.0020	mg/L			10/17/13 12:14	1
pH	8.65	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GC05D

Lab Sample ID: 240-30302-6

Date Collected: 10/16/13 15:42

Matrix: Water

Date Received: 10/17/13 09:30

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	320		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	540		10	10	mg/L			10/22/13 10:33	1
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/21/13 09:34	1
Cr (VI)	0.28		0.010	0.0020	mg/L			10/17/13 12:14	1
pH	9.41	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GCFD

Date Collected: 10/16/13 15:45

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-7

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	310		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/21/13 09:34	1
Cr (VI)	0.32		0.010	0.0020	mg/L			10/17/13 12:15	1
pH	9.40	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GC04D

Lab Sample ID: 240-30302-8

Date Collected: 10/16/13 15:51

Matrix: Water

Date Received: 10/17/13 09:30

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	28		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	860		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/21/13 09:34	1
Cr (VI)	0.027		0.010	0.0020	mg/L			10/17/13 12:15	1
pH	8.00	HF	0.100	0.100	SU			10/17/13 11:32	1

Client Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: DS01

Date Collected: 10/16/13 16:09

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-9

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<2.0		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10	10	mg/L			10/18/13 10:03	1
Total Suspended Solids	<8.0		8.0	8.0	mg/L			10/22/13 09:23	1
Cr (VI)	0.0048	J	0.010	0.0020	mg/L			10/17/13 12:15	1
pH	8.64	HF	0.100	0.100	SU			10/17/13 11:32	1

TestAmerica Canton

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 240-106162/1-A
Matrix: Water
Analysis Batch: 106550

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 106162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<2.0		2.0	2.0	ug/L		10/18/13 09:47	10/21/13 15:51	1

Lab Sample ID: LCS 240-106162/2-A
Matrix: Water
Analysis Batch: 106550

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 106162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1000	1020		ug/L		102	85 - 115

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-106165/1
Matrix: Water
Analysis Batch: 106165

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			10/18/13 10:03	1

Lab Sample ID: LCS 240-106165/2
Matrix: Water
Analysis Batch: 106165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	470	458		mg/L		97	88 - 110

Lab Sample ID: LCS 240-106165/20
Matrix: Water
Analysis Batch: 106165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	470	414		mg/L		88	88 - 110

Lab Sample ID: 240-30302-9 DU
Matrix: Water
Analysis Batch: 106165

Client Sample ID: DS01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1130		mg/L		1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-106138/1
Matrix: Water
Analysis Batch: 106138

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/18/13 09:10	1

TestAmerica Canton

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 240-106138/2

Matrix: Water

Analysis Batch: 106138

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	29.0	24.0		mg/L		83	73 - 113

Lab Sample ID: MB 240-106345/1

Matrix: Water

Analysis Batch: 106345

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/21/13 09:34	1

Lab Sample ID: LCS 240-106345/2

Matrix: Water

Analysis Batch: 106345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	29.0	28.0		mg/L		97	73 - 113

Lab Sample ID: MB 240-106535/1

Matrix: Water

Analysis Batch: 106535

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<4.0		4.0	4.0	mg/L			10/22/13 09:23	1

Lab Sample ID: LCS 240-106535/2

Matrix: Water

Analysis Batch: 106535

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	37.7	33.0		mg/L		88	73 - 113

Method: SM 3500 CR D - Chromium, Hexavalent

Lab Sample ID: MB 240-106004/3

Matrix: Water

Analysis Batch: 106004

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	<0.0020		0.010	0.0020	mg/L			10/17/13 10:55	1

Lab Sample ID: LCS 240-106004/4

Matrix: Water

Analysis Batch: 106004

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.267		mg/L		107	80 - 118

TestAmerica Canton

QC Sample Results

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 240-106018/2

Matrix: Water

Analysis Batch: 106018

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	6.47	6.530		SU		101	97 - 103

Lab Sample ID: 240-30302-6 DU

Matrix: Water

Analysis Batch: 106018

Client Sample ID: GC05D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	9.41	HF	9.380		SU		0.3	20

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Metals

Prep Batch: 106162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-1	US01	Total Recoverable	Water	200.8	
240-30302-2	SC01D	Total Recoverable	Water	200.8	
240-30302-3	SC02D	Total Recoverable	Water	200.8	
240-30302-4	GC09D	Total Recoverable	Water	200.8	
240-30302-5	GC06D	Total Recoverable	Water	200.8	
240-30302-6	GC05D	Total Recoverable	Water	200.8	
240-30302-7	GCFD	Total Recoverable	Water	200.8	
240-30302-8	GC04D	Total Recoverable	Water	200.8	
240-30302-9	DS01	Total Recoverable	Water	200.8	
LCS 240-106162/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
MB 240-106162/1-A	Method Blank	Total Recoverable	Water	200.8	

Analysis Batch: 106550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-1	US01	Total Recoverable	Water	200.8	106162
240-30302-2	SC01D	Total Recoverable	Water	200.8	106162
240-30302-3	SC02D	Total Recoverable	Water	200.8	106162
240-30302-4	GC09D	Total Recoverable	Water	200.8	106162
240-30302-5	GC06D	Total Recoverable	Water	200.8	106162
240-30302-6	GC05D	Total Recoverable	Water	200.8	106162
240-30302-7	GCFD	Total Recoverable	Water	200.8	106162
240-30302-8	GC04D	Total Recoverable	Water	200.8	106162
240-30302-9	DS01	Total Recoverable	Water	200.8	106162
LCS 240-106162/2-A	Lab Control Sample	Total Recoverable	Water	200.8	106162
MB 240-106162/1-A	Method Blank	Total Recoverable	Water	200.8	106162

General Chemistry

Analysis Batch: 106004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-1	US01	Total/NA	Water	SM 3500 CR D	
240-30302-2	SC01D	Total/NA	Water	SM 3500 CR D	
240-30302-3	SC02D	Total/NA	Water	SM 3500 CR D	
240-30302-4	GC09D	Total/NA	Water	SM 3500 CR D	
240-30302-5	GC06D	Total/NA	Water	SM 3500 CR D	
240-30302-6	GC05D	Total/NA	Water	SM 3500 CR D	
240-30302-7	GCFD	Total/NA	Water	SM 3500 CR D	
240-30302-8	GC04D	Total/NA	Water	SM 3500 CR D	
240-30302-9	DS01	Total/NA	Water	SM 3500 CR D	
LCS 240-106004/4	Lab Control Sample	Total/NA	Water	SM 3500 CR D	
MB 240-106004/3	Method Blank	Total/NA	Water	SM 3500 CR D	

Analysis Batch: 106018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-1	US01	Total/NA	Water	SM 4500 H+ B	
240-30302-2	SC01D	Total/NA	Water	SM 4500 H+ B	
240-30302-3	SC02D	Total/NA	Water	SM 4500 H+ B	
240-30302-4	GC09D	Total/NA	Water	SM 4500 H+ B	
240-30302-5	GC06D	Total/NA	Water	SM 4500 H+ B	
240-30302-6	GC05D	Total/NA	Water	SM 4500 H+ B	

TestAmerica Canton

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

General Chemistry (Continued)

Analysis Batch: 106018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-6 DU	GC05D	Total/NA	Water	SM 4500 H+ B	
240-30302-7	GC04D	Total/NA	Water	SM 4500 H+ B	
240-30302-8	GC04D	Total/NA	Water	SM 4500 H+ B	
240-30302-9	DS01	Total/NA	Water	SM 4500 H+ B	
LCS 240-106018/2	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 106138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-1	US01	Total/NA	Water	SM 2540D	
240-30302-2	SC01D	Total/NA	Water	SM 2540D	
240-30302-3	SC02D	Total/NA	Water	SM 2540D	
240-30302-4	GC09D	Total/NA	Water	SM 2540D	
LCS 240-106138/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 240-106138/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 106165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-1	US01	Total/NA	Water	SM 2540C	
240-30302-2	SC01D	Total/NA	Water	SM 2540C	
240-30302-3	SC02D	Total/NA	Water	SM 2540C	
240-30302-4	GC09D	Total/NA	Water	SM 2540C	
240-30302-5	GC06D	Total/NA	Water	SM 2540C	
240-30302-6	GC05D	Total/NA	Water	SM 2540C	
240-30302-7	GC04D	Total/NA	Water	SM 2540C	
240-30302-8	GC04D	Total/NA	Water	SM 2540C	
240-30302-9	DS01	Total/NA	Water	SM 2540C	
240-30302-9 DU	DS01	Total/NA	Water	SM 2540C	
LCS 240-106165/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 240-106165/20	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 240-106165/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 106345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-5	GC06D	Total/NA	Water	SM 2540D	
240-30302-6	GC05D	Total/NA	Water	SM 2540D	
240-30302-7	GC04D	Total/NA	Water	SM 2540D	
240-30302-8	GC04D	Total/NA	Water	SM 2540D	
LCS 240-106345/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 240-106345/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 106535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-30302-9	DS01	Total/NA	Water	SM 2540D	
LCS 240-106535/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 240-106535/1	Method Blank	Total/NA	Water	SM 2540D	

TestAmerica Canton

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: US01

Date Collected: 10/16/13 14:30

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 16:42	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:12	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540D		1	106138	10/18/13 09:10	LCN	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN

Client Sample ID: SC01D

Date Collected: 10/16/13 14:50

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 16:45	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:13	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540D		1	106138	10/18/13 09:10	LCN	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN

Client Sample ID: SC02D

Date Collected: 10/16/13 15:16

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 16:49	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:13	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540D		1	106138	10/18/13 09:10	LCN	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/22/13 10:33	LCN	TAL CAN

Client Sample ID: GC09D

Date Collected: 10/16/13 15:30

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 16:53	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:14	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540D		1	106138	10/18/13 09:10	LCN	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GC09D

Date Collected: 10/16/13 15:30

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN

Client Sample ID: GC06D

Date Collected: 10/16/13 15:38

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 16:57	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:14	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN
Total/NA	Analysis	SM 2540D		1	106345	10/21/13 09:34	LCN	TAL CAN

Client Sample ID: GC05D

Date Collected: 10/16/13 15:42

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 17:01	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:14	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/22/13 10:33	LCN	TAL CAN
Total/NA	Analysis	SM 2540D		1	106345	10/21/13 09:34	LCN	TAL CAN

Client Sample ID: GC0FD

Date Collected: 10/16/13 15:45

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 17:05	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:15	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN
Total/NA	Analysis	SM 2540D		1	106345	10/21/13 09:34	LCN	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Satralloy Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Client Sample ID: GC04D

Date Collected: 10/16/13 15:51

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 17:09	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:15	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN
Total/NA	Analysis	SM 2540D		1	106345	10/21/13 09:34	LCN	TAL CAN

Client Sample ID: DS01

Date Collected: 10/16/13 16:09

Date Received: 10/17/13 09:30

Lab Sample ID: 240-30302-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.8			106162	10/18/13 09:47	ADS	TAL CAN
Total Recoverable	Analysis	200.8		1	106550	10/21/13 17:13	RKT	TAL CAN
Total/NA	Analysis	SM 3500 CR D		1	106004	10/17/13 12:15	LKG	TAL CAN
Total/NA	Analysis	SM 4500 H+ B		1	106018	10/17/13 11:32	NJE	TAL CAN
Total/NA	Analysis	SM 2540C		1	106165	10/18/13 10:03	LCN	TAL CAN
Total/NA	Analysis	SM 2540D		1	106535	10/22/13 09:23	LCN	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 Industrial SWPPP

TestAmerica Job ID: 240-30302-1

Laboratory: TestAmerica Canton

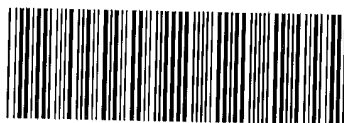
All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

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	07-31-14 *
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
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	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

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

TestAmerica Canton

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



240-30302 Chain of Custody

Chain of Custody Record

1.4

Client Information Client Contact: Bob Ireson Phone: 123-937-2323 E-Mail: kris.brooks@testamericainc.com		Lab PM: Brooks, Kris M. (330) 966-9790 E-Mail: kris.brooks@testamericainc.com		Center Tracking No(s): 240-9122-3944.1 Page: 1 of 1 Job #: 7																																																																																																																																																																																																																																																																																																																											
Company: Golder Associates Inc. Address: 2600 Tiller Lane Suite C City: Columbus State Zip: OH, 43231 Phone: (614) 899-9288 Email: bob.ireson@golder.com Project Name: Construction SWPP Site: Satalloy																																																																																																																																																																																																																																																																																																																															
Due Date Requested: TAT Requested (days): Normal PO #: Purchase Order not required WO #: Project #: 1239330901.300 SSOW#:																																																																																																																																																																																																																																																																																																																															
Analysis Requested																																																																																																																																																																																																																																																																																																																															
<table border="1"> <thead> <tr> <th rowspan="2">Sample Identification</th> <th rowspan="2">Sample Date</th> <th rowspan="2">Sample Time</th> <th rowspan="2">Sample Type (C=Comp, G=grab)</th> <th rowspan="2">Matrix (W=water, S=solid, O=soil, BT=Tissue, A=air)</th> <th colspan="4">Field Filtered Sample (Yes or No)</th> <th colspan="4">Perform MS/MSD (Yes or No)</th> <th colspan="4">Total Suspended Solids (TSS)</th> <th colspan="4">Hexavalent Chromium</th> <th colspan="4">Total Chromium</th> <th colspan="4">Total Dissolved Solids</th> <th rowspan="2">Total Number of Containers</th> <th rowspan="2">Special Instructions/Note:</th> </tr> <tr> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Upstream</td> <td>10/16/13</td> <td>14:30</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>Short Hold Time</td> </tr> <tr> <td>SC-1</td> <td>10/16/13</td> <td>14:50</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>SC-2</td> <td>10/16/13</td> <td>15:16</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>#9</td> <td>10/16/13</td> <td>15:30</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>#6</td> <td>10/16/13</td> <td>15:38</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>#5</td> <td>10/16/13</td> <td>15:42</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>FD</td> <td>10/16/13</td> <td>15:45</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>#4</td> <td>10/16/13</td> <td>15:57</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>Downstream</td> <td>10/16/13</td> <td>16:09</td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>G</td> <td>W</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td></td> </tr> </tbody> </table>						Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Tissue, A=air)	Field Filtered Sample (Yes or No)				Perform MS/MSD (Yes or No)				Total Suspended Solids (TSS)				Hexavalent Chromium				Total Chromium				Total Dissolved Solids				Total Number of Containers	Special Instructions/Note:	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Upstream	10/16/13	14:30	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Short Hold Time	SC-1	10/16/13	14:50	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		SC-2	10/16/13	15:16	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		#9	10/16/13	15:30	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		#6	10/16/13	15:38	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		#5	10/16/13	15:42	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		FD	10/16/13	15:45	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		#4	10/16/13	15:57	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		Downstream	10/16/13	16:09	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N					G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N					G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Tissue, A=air)	Field Filtered Sample (Yes or No)						Perform MS/MSD (Yes or No)				Total Suspended Solids (TSS)				Hexavalent Chromium				Total Chromium				Total Dissolved Solids				Total Number of Containers	Special Instructions/Note:																																																																																																																																																																																																																																																																																															
					Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No																																																																																																																																																																																																																																																																																																									
Upstream	10/16/13	14:30	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Short Hold Time																																																																																																																																																																																																																																																																																																							
SC-1	10/16/13	14:50	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
SC-2	10/16/13	15:16	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
#9	10/16/13	15:30	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
#6	10/16/13	15:38	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
#5	10/16/13	15:42	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
FD	10/16/13	15:45	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
#4	10/16/13	15:57	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
Downstream	10/16/13	16:09	G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
			G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
			G	W	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N																																																																																																																																																																																																																																																																																																									
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological																																																																																																																																																																																																																																																																																																																															
Deliverable Requested: I, II, III, IV, Other (specify)																																																																																																																																																																																																																																																																																																																															
Special Instructions/Requirements:																																																																																																																																																																																																																																																																																																																															
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months																																																																																																																																																																																																																																																																																																																															
Empty Kit Relinquished by:																																																																																																																																																																																																																																																																																																																															
Relinquished by: DAVID HUTCHINSON Date/Time: 10.15.13 / 15:05 Company: Golder																																																																																																																																																																																																																																																																																																																															
Relinquished by:																																																																																																																																																																																																																																																																																																																															
Relinquished by:																																																																																																																																																																																																																																																																																																																															
Custody Seals Intact: ☐ Yes ☐ No																																																																																																																																																																																																																																																																																																																															
Custody Seal No.:																																																																																																																																																																																																																																																																																																																															

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
UPSTREAM	240-30302-A-1	Plastic 250ml - with Nitric Acid	<2	_____	_____
SC-1	240-30302-A-2	Plastic 250ml - with Nitric Acid	<2	_____	_____
SC-2	240-30302-A-3	Plastic 250ml - with Nitric Acid	<2	_____	_____
#9	240-30302-A-4	Plastic 250ml - with Nitric Acid	<2	_____	_____
#6	240-30302-A-5	Plastic 250ml - with Nitric Acid	<2	_____	_____
#5	240-30302-A-6	Plastic 250ml - with Nitric Acid	<2	_____	_____
FB	240-30302-A-7	Plastic 250ml - with Nitric Acid	<2	_____	_____
#4	240-30302-A-8	Plastic 250ml - with Nitric Acid	<2	_____	_____
DOWNSTREAM	240-30302-A-9	Plastic 250ml - with Nitric Acid	<2	_____	_____