

# Appendix M

## Analytical Data Reports

**Appendix M - Analytical Data Report Summary Table**

Analytical Laboratory	Report SDG*	RIR PDF Part Number	Date Sample Collection Started	Task Description
TAL	180-34692-2	Part 2 of 8	7/9/2014	RI
TAL	480-74590-1	Part 2 of 8	1/21/2015	RI
TAL	480-43221-1	Part 3 of 8	8/5/2013	2013 Phase II
TAL	480-61767-1	Part 3 of 8	6/10/2014	RI
TAL	480-61864-1	Part 3 of 8	6/11/2014	RI
TAL	480-61974-1	Part 3 of 8	6/13/2014	RI
TAL	480-61977-1	Part 3 of 8	6/13/2014	RI
TAL	180-34128-1	Part 3 of 8	6/19/2014	RI
TAL	180-34168-1	Part 3 of 8	6/20/2014	RI
TAL	180-34247-1	Part 3 of 8	6/23/2014	RI
TAL	180-34257-1	Part 4 of 8	6/24/2014	RI
TAL	180-34314-1	Part 4 of 8	6/25/2014	RI
TAL	180-34454-1	Part 4 of 8	6/23/2014	RI
TAL	180-34523-2	Part 4 of 8	7/2/2014	RI
TAL	180-34795-1	Part 4 of 8	7/10/2014	RI
TAL	180-35240-1	Part 4 of 8	7/28/2014	RI
TAL	180-35324-1	Part 4 of 8	7/30/2014	RI
TAL	180-35401-1	Part 4 of 8	8/4/2014	RI
TAL	180-35476-1	Part 4 of 8	8/5/2014	RI
TAL	180-35476-2	Part 4 of 8	8/5/2014	RI
TAL	180-35577-1	Part 4 of 8	8/6/2014	RI
TAL	480-70844-1	Part 5 of 8	11/5/2014	Sup RI
TAL	480-70845-1	Part 5 of 8	11/5/2014	Sup RI
TAL	480-71126-1	Part 5 of 8	11/10/2014	Sup RI
TAL	480-71351-1	Part 5 of 8	11/12/2014	Sup RI
TAL	480-71351-2	Part 5 of 8	11/12/2014	Sup RI
TAL	480-71408-1	Part 5 of 8	11/12/2014	Sup RI
TAL	480-71435-1	Part 5 of 8	11/13/2014	Sup RI
TAL	480-71435-3	Part 5 of 8	11/13/2014	Sup RI
TAL	480-71076-1	Part 5 of 8	11/7/2014	Sup RI
TAL	480-71491-1	Part 5 of 8	11/14/2014	Sup RI
TAL	480-71855-1	Part 5 of 8	11/21/2014	Sup RI
TAL	480-72869-1	Part 5 of 8	12/10/2014	Sup RI
TAL	480-72869-2	Part 5 of 8	12/10/2014	Sup RI
TAL	480-72872-1	Part 5 of 8	12/10/2014	Sup RI
TAL	480-72933-1	Part 5 of 8	12/11/2014	Sup RI
TAL	480-73515-1	Part 5 of 8	12/22/2014	Sup RI
PACE	15050308	Part 6 of 8	5/15/2015	Sup RI
PACE	15050309	Part 6 of 8	5/15/2015	Sup RI
PACE	15050311	Part 6 of 8	5/15/2015	Sup RI
PACE	15050312	Part 6 of 8	5/15/2015	Sup RI
PACE	15050313	Part 6 of 8	5/15/2015	Sup RI
PACE	15050393	Part 6 of 8	5/20/2015	Sup RI
PACE	15050394	Part 6 of 8	5/20/2015	Sup RI

**Appendix M - Analytical Data Report Summary Table**

Analytical Laboratory	Report SDG*	RIR PDF Part Number	Date Sample Collection Started	Task Description
PACE	15050395	Part 6 of 8	5/20/2015	Sup RI
PACE	15050396	Part 6 of 8	5/20/2015	Sup RI
PACE	15050426	Part 6 of 8	5/21/2015	Sup RI
PACE	15050427	Part 6 of 8	5/21/2015	Sup RI
PACE	15050428	Part 6 of 8	5/21/2015	Sup RI
PACE	15050447	Part 6 of 8	5/22/2015	Sup RI
PACE	15050448	Part 6 of 8	5/22/2015	Sup RI
PACE	15060039	Part 6 of 8	5/20/2015	Sup RI
PACE	15060090	Part 6 of 8	6/2/2015	Sup RI
PACE	15060162	Part 6 of 8	6/4/2015	Sup RI
PACE	15060163	Part 6 of 8	6/4/2015	Sup RI
PACE	15060164	Part 6 of 8	6/4/2015	Sup RI
PACE	15060165	Part 6 of 8	6/4/2015	Sup RI
PACE	15060166	Part 6 of 8	6/4/2015	Sup RI
PACE	15060179	Part 6 of 8	6/3/2015	Sup RI
PACE	15060180	Part 6 of 8	6/3/2015	Sup RI
PACE	15060181	Part 6 of 8	6/3/2015	Sup RI
PACE	15060182	Part 6 of 8	6/3/2015	Sup RI
PACE	15060183	Part 6 of 8	6/3/2015	Sup RI
PACE	15060184	Part 6 of 8	6/3/2015	Sup RI
PACE	15060207	Part 6 of 8	6/5/2015	Sup RI
PACE	15060208	Part 6 of 8	6/5/2015	Sup RI
PACE	15060209	Part 6 of 8	6/5/2015	Sup RI
PACE	15060210	Part 6 of 8	6/5/2015	Sup RI
TAL	480-83509-1	Part 7 of 8	7/6/2015	Sup RI
TAL	480-83689-1	Part 7 of 8	7/9/2015	Sup RI
TAL	480-83719-1	Part 7 of 8	7/10/2015	Sup RI
TAL	480-83832-1	Part 7 of 8	7/13/2015	Sup RI
TAL	480-83939-1	Part 7 of 8	7/14/2015	Sup RI
TAL	480-84032-1	Part 7 of 8	7/15/2015	Sup RI
TAL	480-84128-1	Part 7 of 8	7/16/2015	Sup RI
TAL	480-84196-1	Part 7 of 8	7/17/2015	Sup RI
TAL	480-84985-1	Part 7 of 8	8/3/2015	Sup RI
TAL	480-85072-1	Part 7 of 8	8/4/2015	Sup RI
TAL	480-85169-1	Part 7 of 8	8/5/2015	Sup RI
TAL	480-85261-1	Part 7 of 8	8/6/2015	Sup RI
TAL	480-85261-2	Part 7 of 8	8/6/2015	Sup RI
TAL	480-85307-1	Part 7 of 8	8/7/2015	Sup RI
TAL	480-86437-1	Part 7 of 8	8/31/2015	Sup RI
TAL	480-86538-1	Part 7 of 8	9/1/2015	Sup RI
TAL	480-86629-1	Part 7 of 8	9/2/2015	Sup RI
TAL	480-86629-2	Part 7 of 8	9/2/2015	Sup RI
TAL	480-86753-1	Part 7 of 8	9/3/2015	Sup RI
TAL	480-86753-2	Part 7 of 8	9/3/2015	Sup RI

**Appendix M - Analytical Data Report Summary Table**

Analytical Laboratory	Report SDG*	RIR PDF Part Number	Date Sample Collection Started	Task Description
TAL	460-120534-1	Part 8 of 8	9/20/2016	EPA SC
TAL	460-120802-1	Part 8 of 8	9/20/2016	EPA SC
TAL	460-120856-1	Part 8 of 8	9/21/2016	EPA SC
TAL	460-120872-1	Part 8 of 8	9/22/2016	EPA SC
TAL	460-120872-2	Part 8 of 8	9/22/2016	EPA SC
TAL	460-122262-1	Part 8 of 8	10/19/2016	EPA SC
TAL	460-122616-1	Part 8 of 8	10/25/2016	EPA SC
TAL	460-122784-1	Part 8 of 8	10/27/2016	EPA SC
TAL	460-125322-1	Part 8 of 8	12/13/2016	EPA SC
TAL	460-125424-1	Part 8 of 8	12/14/2016	EPA SC
TAL	460-125507-1	Part 8 of 8	12/15/2016	EPA SC
TAL	460-125507-2	Part 8 of 8	12/15/2016	EPA SC
TAL	460-125509-1	Part 8 of 8	12/15/2016	EPA SC
TAL	460-125604-1	Part 8 of 8	12/16/2016	EPA SC
TAL	460-125613-1	Part 8 of 8	12/16/2016	EPA SC
TAL	460-125842-1	Part 8 of 8	12/21/2016	EPA SC
TAL	460-125925-1	Part 8 of 8	12/22/2016	EPA SC
TAL	460-125989-1	Part 8 of 8	12/23/2016	EPA SC
TAL	480-105891-1	Part 8 of 8	9/12/2016	EPA SC
TAL	480-105893-1	Part 8 of 8	9/13/2016	EPA SC
TAL	480-106084-1	Part 8 of 8	9/14/2016	EPA SC
TAL	480-106145-1	Part 8 of 8	9/14/2016	EPA SC
TAL	480-106158-1	Part 8 of 8	9/16/2016	EPA SC
TAL	480-106341-1	Part 8 of 8	9/19/2016	EPA SC
TAL	480-106511-1	Part 8 of 8	9/23/2016	EPA SC
TAL	480-107053-1	Part 8 of 8	10/3/2016	EPA SC
TAL	480-107161-1	Part 8 of 8	10/5/2016	EPA SC
TAL	480-107243-1	Part 8 of 8	10/6/2016	EPA SC
TAL	480-108352-1	Part 8 of 8	10/24/2016	EPA SC
TAL	480-110224-1	Part 8 of 8	11/29/2016	EPA SC
TAL	480-110297-1	Part 8 of 8	11/30/2016	EPA SC
TAL	480-110377-1	Part 8 of 8	12/1/2016	EPA SC
TAL	480-110377-2	Part 8 of 8	12/1/2016	EPA SC
TAL	480-110454-1	Part 8 of 8	12/2/2016	EPA SC
TAL	480-110454-2	Part 8 of 8	12/2/2016	EPA SC
TAL	480-110534-1	Part 8 of 8	12/5/2016	EPA SC
TAL	480-110534-2	Part 8 of 8	12/5/2016	EPA SC
TAL	480-110643-1	Part 8 of 8	12/6/2016	EPA SC
TAL	480-110745-1	Part 8 of 8	12/7/2016	EPA SC
TAL	480-110872-1	Part 8 of 8	12/8/2016	EPA SC
TAL	480-110873-1	Part 8 of 8	12/8/2016	EPA SC
TAL	480-110874-1	Part 8 of 8	12/8/2016	EPA SC
TAL	480-110930-1	Part 8 of 8	12/9/2016	EPA SC
TAL	480-110932-1	Part 8 of 8	12/9/2016	EPA SC

## Appendix M - Analytical Data Report Summary Table

Analytical Laboratory	Report SDG*	RIR PDF Part Number	Date Sample Collection Started	Task Description
TAL	480-111000-1	Part 8 of 8	12/12/2016	EPA SC
TAL	480-111332-1	Part 8 of 8	12/19/2016	EPA SC
TAL	480-111333-1	Part 8 of 8	12/19/2016	EPA SC
TAL	480-107342-1	Part 8 of 8	10/7/2016	EPA SC
TAL	460-125515-1	Part 8 of 8	12/15/2016	EPA SC
TAL	460-125775-1	Part 8 of 8	12/20/2016	EPA SC & SRI
TAL	460-126268-1	Part 8 of 8	1/3/2017	EPA SC & SRI

Notes:

EPA SC = US Environmental Protection Agency Site Characterization

PACE = Pace Analytical

RI = Remedial Investigation

RIR = Remedial Investigation Report

SDG = Sample Delivery Group

SRI = Supplemental Remedial Investigation

TAL = TestAmerica Laboratories, Inc.

\* = Some laboratory reports have been grouped together by the lab. As such, the listed report may contain additional reports, which are not indicated by the report/file title.

## ANALYTICAL REPORT

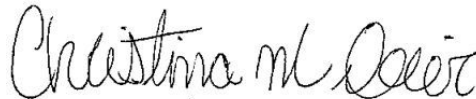
Job Number: 180-34692-2

Job Description: Astoria Steel - Boring Grain Size

For:

Stantec Consulting Services Inc  
61 Commercial Street  
Rochester, NY 14614

Attention: Mr. Michael Storonsky



Approved for release.  
Christina M Dosier  
Project Mgmt. Assistant  
7/18/2014 4:36 PM

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Designee for  
Ryan T VanDette, Project Manager II  
10 Hazelwood Drive, Amherst, NY, 14228-2298  
(716)504-9830  
ryan.vandette@testamericainc.com  
07/18/2014

cc: Ms. Carole Lieu  
Katie Premo  
Ms. Stephanie Reynolds-Smith

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the 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. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

**TestAmerica Laboratories, Inc.**

TestAmerica Pittsburgh 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238  
Tel (412) 963-7058 Fax (412) 963-2468 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative**  
**180-34692-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 7/10/2014 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5° C.

**Geotechnical**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## EXECUTIVE SUMMARY - Detections

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>180-34692-2</b>	<b>AS-B163-GS</b>					
Gravel		15.6			%	D422
Sieve Size 3 inch - Percent Finer		100.0			% Passing	D422
Sand		61.4			%	D422
Sieve Size 2 inch - Percent Finer		100.0			% Passing	D422
Coarse Sand		11.0			%	D422
Sieve Size 1.5 inch - Percent Finer		100.0			% Passing	D422
Medium Sand		19.2			%	D422
Sieve Size 1 inch - Percent Finer		100.0			% Passing	D422
Fine Sand		31.2			%	D422
Sieve Size 0.75 inch - Percent Finer		100.0			% Passing	D422
Silt		12.5			%	D422
Sieve Size 0.375 inch - Percent Finer		94.1			% Passing	D422
Clay		10.5			%	D422
Sieve Size #4 - Percent Finer		84.4			% Passing	D422
Sieve Size #10 - Percent Finer		73.4			% Passing	D422
Sieve Size #20 - Percent Finer		65.3			% Passing	D422
Sieve Size #40 - Percent Finer		54.2			% Passing	D422
Sieve Size #60 - Percent Finer		41.9			% Passing	D422
Sieve Size #80 - Percent Finer		34.3			% Passing	D422
Sieve Size #100 - Percent Finer		30.5			% Passing	D422
Sieve Size #200 - Percent Finer		23.0			% Passing	D422
Hydrometer Reading 1 - Percent Finer		21.0			% Passing	D422
Hydrometer Reading 2 - Percent Finer		18.0			% Passing	D422
Hydrometer Reading 3 - Percent Finer		15.0			% Passing	D422
Hydrometer Reading 4 - Percent Finer		13.0			% Passing	D422
Hydrometer Reading 5 - Percent Finer		10.5			% Passing	D422
Hydrometer Reading 6 - Percent Finer		6.8			% Passing	D422
Hydrometer Reading 7 - Percent Finer		4.7			% Passing	D422



## METHOD SUMMARY

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Solid</b>			
Grain Size	TAL BUR	ASTM D422	

### Lab References:

TAL BUR = TestAmerica Burlington

### Method References:

ASTM = ASTM International

**METHOD / ANALYST SUMMARY**

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
ASTM D422	Lavigne, Scott M	SML

## SAMPLE SUMMARY

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
180-34692-2	AS-B163-GS	Solid	07/09/2014 0955	07/10/2014 0945

# **SAMPLE RESULTS**



**Analytical Data**

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

**Client Sample ID: AS-B163-GS**

Lab Sample ID: 180-34692-2

Date Sampled: 07/09/2014 0955

Client Matrix: Solid

Date Received: 07/10/2014 0945

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**D422 Grain Size**

Analysis Method:	D422	Analysis Batch:	200-74998	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	180-34692-A-2.txt
Dilution:	1.0			Initial Weight/Volume:	190.05 g
Analysis Date:	07/14/2014 1612			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	NONE	NONE
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		94.1			
Sieve Size #4 - Percent Finer		84.4			
Sieve Size #10 - Percent Finer		73.4			
Sieve Size #20 - Percent Finer		65.3			
Sieve Size #40 - Percent Finer		54.2			
Sieve Size #60 - Percent Finer		41.9			
Sieve Size #80 - Percent Finer		34.3			
Sieve Size #100 - Percent Finer		30.5			
Sieve Size #200 - Percent Finer		23.0			
Hydrometer Reading 1 - Percent Finer		21.0			
Hydrometer Reading 2 - Percent Finer		18.0			
Hydrometer Reading 3 - Percent Finer		15.0			
Hydrometer Reading 4 - Percent Finer		13.0			
Hydrometer Reading 5 - Percent Finer		10.5			
Hydrometer Reading 6 - Percent Finer		6.8			
Hydrometer Reading 7 - Percent Finer		4.7			



# TestAmerica Burlington

## Sediment Grain Size - D422

Client	
Client Sample ID	AS-B163-GS
Lab Sample ID	180-34692-A-2

Date Received	7/10/2014
Start Date	07/14/2014 16:12
End Date	07/17/2014 8:47

### Dry Weight Determination

Tin Weight	1.02 g
Wet Sample + Tin	26.12 g
Dry Sample + Tin	22.21 g
% Moisture	15.58 %

Non-soil material:	na
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	07/14/2014 16:15
Date/Time out of oven	07/16/2014 9:41

### Sample Weights

	Tare (g)	Pan+Sample (g)	Samp (g)
Sample Weight (Wet)		190.05	190.05
Sample Weight (Oven Dried)			160

### Hydrometer Data

Serial Number	705151
Calib. Date (mm/dd/yyyy)	03/12/2013
Low Temp (C)	17.0
Reading at Low Temp	1.0050
High Temp (C)	23.0
Reading at High Temp	1.0040
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.007833333
Default Soil Gravity	2.6500

### Sample Split (oven dried)

	Tare (g)	Pan+Sample (g)	Samp (g)
Sample >=#10			42.5
Sample <#10			118
% Passing #10			62.1

### Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000			0.00 g	100.0	Gravel	
2 inch	50000			0.00 g	100.0	Gravel	
1.5 inch	37500			0.00 g	100.0	Gravel	
1 inch	25000			0.00 g	100.0	Gravel	
3/4 inch	19000			0.00 g	100.0	Gravel	
3/8 inch	9500	447.37	456.81	9.44 g	94.1	Gravel	
#4	4750	488.20	503.73	15.53 g	84.4	Gravel	
#10	2000	462.98	480.51	17.53 g	73.4	Sand	Coarse
#20	850	380.97	393.90	12.93 g	65.3	Sand	Medium
#40	425	353.79	371.62	17.83 g	54.2	Sand	Medium
#60	250	352.44	372.12	19.68 g	41.9	Sand	Fine
#80	180	340.22	352.34	12.12 g	34.3	Sand	Fine
#100	150	331.11	337.21	6.10 g	30.5	Sand	Fine
#200	75	329.67	341.65	11.98 g	23.0	Sand	Fine
				0.00 g	23.0		

### Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	160
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### Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size		
				(Micron)	% Finer	Classification
2	2	1.0250	22.5	29.1	21 Silt	
5	5	1.0220	22.5	19.2	18 Silt	
15	15	1.0190	22.5	11.5	15 Silt	
30	30	1.0170	22.5	8.3	13 Silt	
60	59	1.0145	22.5	6.1	10.5 Silt	
250	256	1.0110	21.5	3.1	6.78 Clay	
1440	1440	1.0090	21.0	1.3	4.68 Clay	



## DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description
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# QUALITY CONTROL RESULTS

**Quality Control Results**

Client: Stantec Consulting Services Inc

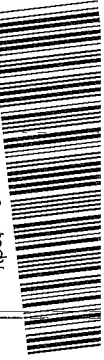
Job Number: 180-34692-2

**QC Association Summary**

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>Geotechnical</b>					
<b>Analysis Batch:200-74998</b>					
180-34692-2	AS-B163-GS	T	Solid	D422	

Report Basis

T = Total



Name (for report and invoice) **Mike Stornosky**  
 Company **Stantec**  
 Address **61 Commercial St. Suite 100**  
 City **Rochester** State **NY**  
 Phone **(585) 413-5266** Fax **(585) 413-5266**

Samplers Name (Printed) **A. GIOSE**  
 P.O. # **190500817**  
 Analysis Turnaround Time  
 Standard   
 Rush Charges Authorized For:  
 1 Week  2 Week  5 day  Other   
**RESULTS**

Site/Project Identification **Astoria Steel RI**  
 State (Location of site): NJ:  NY:  Other:   
 Regulatory Program: **NYSDEC BCP**

LAB USE ONLY  
 Project No:  
 Job No:  
 Sample Numbers

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL SVOCs + up to 10 TICs	TCL SVOCs + up to 20 TICs	PCBs	Pesticides	TAL metals	Cyanide	Grain size Analysis
AS-B163-S	7/19/14	950	SO	3+ 15655	X	X	X	X	X	X	X
AS-B163-GS	7/19/14	955	SO	1							
AS-MH1A-S	7/19/14	1035	SO	1							
AS-MH1B-S	7/19/14	1640	SO	2+ 15655	X	X	X	X	X	X	
AS-MH2-S	7/19/14	1205	SO	3+ 15655	X	X	X	X	X	X	
<b>7/19/2014</b>											

Preservation Used: 1 = ICE, 2 = HCl, 3 = H<sub>2</sub>SO<sub>4</sub>, 4 = HNO<sub>3</sub>, 5 = NaOH  
 6 = Other **SO35 Kit**, 7 = Other \_\_\_\_\_  
 Soil: **6** Water: \_\_\_\_\_

**Special Instructions** EQUIS AHIE EFWEDD, Category B deliverables for soil samples Water Metals Filtered (Yes/No)? \_\_\_\_\_

Relinquished by	Company	Date / Time	Received by	Company
<i>[Signature]</i>	Stantec	7/19/14 1600	<i>[Signature]</i>	J.A. NYC
<i>[Signature]</i>	Test Am	7/19/14 1800	<i>[Signature]</i>	JAP
	Company	Date / Time	Received by	Company
	Company	Date / Time	Received by	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).  
 Massachusetts (M-NJ312), North Carolina (No. 578)  
 TAL - 0016 (0408)

## Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

**Login Number: 34692**  
**List Number: 1**  
**Creator: Watson, Debbie**

**List Source: TestAmerica Pittsburgh**

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

Login Number: 34692

List Source: TestAmerica Pittsburgh

List Number: 2

Creator: Watson, Debbie

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

## Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 180-34692-2

**Login Number: 34692**  
**List Number: 3**  
**Creator: Lavigne, Scott M**

**List Source: TestAmerica Burlington**  
**List Creation: 07/11/14 01:01 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	No numbers
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6C°/IR GUN ID 181. CF = -0.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-74590-1

Client Project/Site: Astoria Steel - Waste Characterization

Revision: 1

For:

Stantec Consulting Services Inc

61 Commercial Street

Rochester, New York 14614

Attn: Mr. Michael Storonsky



Authorized for release by:

2/3/2015 4:49:49 PM

Ryan VanDette, Project Manager II

(716)504-9830

[ryan.vandette@testamericainc.com](mailto:ryan.vandette@testamericainc.com)



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[www.testamericainc.com](http://www.testamericainc.com)

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*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.*

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# Definitions/Glossary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits
X	Surrogate is outside control limits

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

### General Chemistry

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.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

## 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
CFL	Contains Free Liquid
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: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Job ID: 480-74590-1**

**Laboratory: TestAmerica Buffalo**

## Narrative

### Job Narrative 480-74590-1

#### Comments

This report has been revised to change the units of measure on method 6010C data.

No additional comments.

#### Receipt

The samples were received on 1/23/2015 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0° C and 3.2° C.

#### GC Semi VOA

Method(s) 8015D: The following samples were diluted due to the nature of the sample matrix: (480-74590-12 MS), (480-74590-12 MSD), AS-WC-SP1-T1-S (480-74590-5), AS-WC-SP1-T2-S (480-74590-6), AS-WC-SP1-T4-S (480-74590-8), AS-WC-SP1-T5-S (480-74590-9), AS-WC-SP2-T14-S (480-74590-25), AS-WC-SP2-T1-S (480-74590-12), AS-WC-SP2-T6-S (480-74590-17). Elevated reporting limits (RLs) are provided.

Method(s) 8015D: The following samples required a dilution due to the nature of the sample matrix: AS-WC-SP1-T1-S (480-74590-5), AS-WC-SP1-T2-S (480-74590-6), AS-WC-SP1-T4-S (480-74590-8), AS-WC-SP1-T5-S (480-74590-9). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8015D: The following sample was diluted due to the nature of the sample matrix: (480-74590-12 MS), (480-74590-12 MSD). As such, MS/MSD spike recoveries were diluted out and are not reported.

Method(s) 8015D: The percent difference of surrogate o-Terphenyl in the continuing calibration verifications exceeded 20% due to the decreased instrument response following field samples that had heavy matrix effects; (CCV 480-224665/19), (CCV 480-224665/27). Samples associated with these continuing calibration verifications were analyzed twice with similar results to confirm the effects of the sample matrix on instrument response. (CCV 480-224665/19), (CCV 480-224665/27)

Method(s) 8015D: The recovery of surrogate o-Terphenyl for the sample (480-74590-24 MSD), AS-WC-SP2-T2-S (480-74590-13) was outside control limits. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015D: The following samples were diluted due to the nature of the sample matrix: (480-74590-24 MS), (480-74590-24 MSD), AS-WC-SP1-T3-S (480-74590-7), AS-WC-SP2-T11-S (480-74590-22), AS-WC-SP2-T12-S (480-74590-23), AS-WC-SP2-T13-S (480-74590-24), AS-WC-SP2-T15-S (480-74590-26), AS-WC-SP2-T2-S (480-74590-13), AS-WC-SP2-T3-S (480-74590-14), AS-WC-SP3-T1-S (480-74590-27). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-225052/75) for analytical batch 480-225052 contained barium above the upper quality control limit. All reported TCLP samples associated with this CCVL were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples AS-WC-SP2-C4-S (480-74590-2), AS-WC-SP2-C5-S (480-74590-3), AS-WC-SP3-C2-S (480-74590-4) was not performed.

Method(s) 6010C: The TCLP leachate blank for batch 480-224354 contained Barium above the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated samples were also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

Method(s) 9045D: The following sample(s) was received outside of holding time: AS-WC-SP1-C3-S (480-74590-1), AS-WC-SP2-C4-S (480-74590-2), AS-WC-SP2-C5-S (480-74590-3), AS-WC-SP3-C2-S (480-74590-4).

# Case Narrative

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

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## Job ID: 480-74590-1 (Continued)

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### Laboratory: TestAmerica Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

Method(s) 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: AS-WC-SP1-T1-S (480-74590-5), AS-WC-SP1-T2-S (480-74590-6), AS-WC-SP1-T4-S (480-74590-8), AS-WC-SP1-T5-S (480-74590-9), AS-WC-SP1-T6-S (480-74590-10), AS-WC-SP1-T7-S (480-74590-11). The reporting limits (RLs) are elevated proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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# Detection Summary

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP1-C3-S

## Lab Sample ID: 480-74590-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.34	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.0030		0.0020	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0016	J B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.030		0.010	0.0030	mg/L	1		6010C	TCLP
Cyanide, Reactive	0.025	J	10	0.0030	mg/Kg	1		9012	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>176.0		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	8.07	HF	0.100	0.100	SU	1		9045D	Total/NA

## Client Sample ID: AS-WC-SP2-C4-S

## Lab Sample ID: 480-74590-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0056	J	0.015	0.0056	mg/L	1		6010C	TCLP
Barium	0.47	B ^	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.0040		0.0020	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0035	J B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.057		0.010	0.0030	mg/L	1		6010C	TCLP
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>176.0		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	7.94	HF	0.100	0.100	SU	1		9045D	Total/NA

## Client Sample ID: AS-WC-SP2-C5-S

## Lab Sample ID: 480-74590-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.52	B ^	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.0040		0.0020	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0044	B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.10		0.010	0.0030	mg/L	1		6010C	TCLP
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>176.0		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	9.81	HF	0.100	0.100	SU	1		9045D	Total/NA

## Client Sample ID: AS-WC-SP3-C2-S

## Lab Sample ID: 480-74590-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0096	J	0.015	0.0056	mg/L	1		6010C	TCLP
Barium	0.39	B ^	0.0020	0.00070	mg/L	1		6010C	TCLP
Cadmium	0.0015	J	0.0020	0.00050	mg/L	1		6010C	TCLP
Chromium	0.0067	B	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.016		0.010	0.0030	mg/L	1		6010C	TCLP
Sulfide, Reactive	8.0	J	10	0.57	mg/Kg	1		9034	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>176.0		50.0	50.0	Degrees F	1		1010A	Total/NA
pH	9.27	HF	0.100	0.100	SU	1		9045D	Total/NA

## Client Sample ID: AS-WC-SP1-T1-S

## Lab Sample ID: 480-74590-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP1-T2-S

Lab Sample ID: 480-74590-6

No Detections.

## Client Sample ID: AS-WC-SP1-T3-S

Lab Sample ID: 480-74590-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	65		38	11	mg/Kg	2	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP1-T4-S

Lab Sample ID: 480-74590-8

No Detections.

## Client Sample ID: AS-WC-SP1-T5-S

Lab Sample ID: 480-74590-9

No Detections.

## Client Sample ID: AS-WC-SP1-T6-S

Lab Sample ID: 480-74590-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	250		150	44	mg/Kg	1	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP1-T7-S

Lab Sample ID: 480-74590-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	260		170	52	mg/Kg	1	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T1-S

Lab Sample ID: 480-74590-12

No Detections.

## Client Sample ID: AS-WC-SP2-T2-S

Lab Sample ID: 480-74590-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	110		91	27	mg/Kg	5	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T3-S

Lab Sample ID: 480-74590-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	70		38	11	mg/Kg	2	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T4-S

Lab Sample ID: 480-74590-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	69		18	5.5	mg/Kg	1	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T5-S

Lab Sample ID: 480-74590-16

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP2-T5-S (Continued)

Lab Sample ID: 480-74590-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	29		19	5.7	mg/Kg	1	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T6-S

Lab Sample ID: 480-74590-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	150		91	27	mg/Kg	5	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T7-S

Lab Sample ID: 480-74590-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	67		18	5.5	mg/Kg	1	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T8-S

Lab Sample ID: 480-74590-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	50		18	5.4	mg/Kg	1	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T9-S

Lab Sample ID: 480-74590-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	77		18	5.5	mg/Kg	1	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T10-S

Lab Sample ID: 480-74590-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	45		18	5.5	mg/Kg	1	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T11-S

Lab Sample ID: 480-74590-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	43		37	11	mg/Kg	2	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T12-S

Lab Sample ID: 480-74590-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	60		37	11	mg/Kg	2	☒	8015D	Total/NA

## Client Sample ID: AS-WC-SP2-T13-S

Lab Sample ID: 480-74590-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	110		90	27	mg/Kg	5	☒	8015D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP2-T14-S

Lab Sample ID: 480-74590-25

No Detections.

## Client Sample ID: AS-WC-SP2-T15-S

Lab Sample ID: 480-74590-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	67		37	11	mg/Kg	2	☼	8015D	Total/NA

## Client Sample ID: AS-WC-SP3-T1-S

Lab Sample ID: 480-74590-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Petroleum Hydrocarbons (C10-C28)	61		35	11	mg/Kg	2	☼	8015D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo





# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-C3-S**

**Lab Sample ID: 480-74590-1**

Date Collected: 01/21/15 09:50

Matrix: Solid

Date Received: 01/23/15 09:00

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		01/29/15 07:40	01/29/15 14:21	1
<b>Barium</b>	<b>0.34</b>	<b>B</b>	0.0020	0.00070	mg/L		01/29/15 07:40	01/29/15 16:46	1
<b>Cadmium</b>	<b>0.0030</b>		0.0020	0.00050	mg/L		01/29/15 07:40	01/29/15 14:21	1
<b>Chromium</b>	<b>0.0016</b>	<b>J B</b>	0.0040	0.0010	mg/L		01/29/15 07:40	01/29/15 14:21	1
<b>Lead</b>	<b>0.030</b>		0.010	0.0030	mg/L		01/29/15 07:40	01/29/15 14:21	1
Selenium	ND		0.025	0.0087	mg/L		01/29/15 07:40	01/29/15 14:21	1
Silver	ND		0.0060	0.0017	mg/L		01/29/15 07:40	01/29/15 14:21	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/28/15 08:10	01/28/15 12:53	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Reactive</b>	<b>0.025</b>	<b>J</b>	10	0.0030	mg/Kg		01/26/15 01:45	01/27/15 07:55	1
Sulfide, Reactive	ND		10	0.57	mg/Kg		01/26/15 01:45	01/27/15 08:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Flashpoint</b>	<b>&gt;176.0</b>		50.0	50.0	Degrees F			01/27/15 08:55	1
<b>pH</b>	<b>8.07</b>	<b>HF</b>	0.100	0.100	SU			01/29/15 10:40	1

# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-C4-S**

**Lab Sample ID: 480-74590-2**

Date Collected: 01/21/15 13:25

Matrix: Solid

Date Received: 01/23/15 09:00

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0056	J	0.015	0.0056	mg/L		01/29/15 07:40	01/29/15 14:24	1
Barium	0.47	B ^	0.0020	0.00070	mg/L		01/29/15 07:40	01/29/15 16:57	1
Cadmium	0.0040		0.0020	0.00050	mg/L		01/29/15 07:40	01/29/15 14:24	1
Chromium	0.0035	J B	0.0040	0.0010	mg/L		01/29/15 07:40	01/29/15 14:24	1
Lead	0.057		0.010	0.0030	mg/L		01/29/15 07:40	01/29/15 14:24	1
Selenium	ND		0.025	0.0087	mg/L		01/29/15 07:40	01/29/15 14:24	1
Silver	ND		0.0060	0.0017	mg/L		01/29/15 07:40	01/29/15 14:24	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/28/15 08:10	01/28/15 12:54	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10	0.0030	mg/Kg		01/26/15 01:45	01/27/15 07:55	1
Sulfide, Reactive	ND		10	0.57	mg/Kg		01/26/15 01:45	01/27/15 08:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176.0		50.0	50.0	Degrees F			01/27/15 08:55	1
pH	7.94	HF	0.100	0.100	SU			01/29/15 10:40	1

# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-C5-S**

**Lab Sample ID: 480-74590-3**

**Date Collected: 01/21/15 15:00**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		01/29/15 07:40	01/29/15 14:27	1
<b>Barium</b>	<b>0.52</b>	<b>B ^</b>	0.0020	0.00070	mg/L		01/29/15 07:40	01/29/15 17:00	1
<b>Cadmium</b>	<b>0.0040</b>		0.0020	0.00050	mg/L		01/29/15 07:40	01/29/15 14:27	1
<b>Chromium</b>	<b>0.0044</b>	<b>B</b>	0.0040	0.0010	mg/L		01/29/15 07:40	01/29/15 14:27	1
<b>Lead</b>	<b>0.10</b>		0.010	0.0030	mg/L		01/29/15 07:40	01/29/15 14:27	1
Selenium	ND		0.025	0.0087	mg/L		01/29/15 07:40	01/29/15 14:27	1
Silver	ND		0.0060	0.0017	mg/L		01/29/15 07:40	01/29/15 14:27	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/28/15 08:10	01/28/15 12:59	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10	0.0030	mg/Kg		01/26/15 01:45	01/27/15 07:55	1
Sulfide, Reactive	ND		10	0.57	mg/Kg		01/26/15 01:45	01/27/15 08:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Flashpoint</b>	<b>&gt;176.0</b>		50.0	50.0	Degrees F			01/28/15 07:48	1
<b>pH</b>	<b>9.81</b>	<b>HF</b>	0.100	0.100	SU			01/29/15 10:40	1

# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP3-C2-S**

**Lab Sample ID: 480-74590-4**

Date Collected: 01/21/15 15:25

Matrix: Solid

Date Received: 01/23/15 09:00

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0096	J	0.015	0.0056	mg/L		01/29/15 07:40	01/29/15 14:30	1
Barium	0.39	B ^	0.0020	0.00070	mg/L		01/29/15 07:40	01/29/15 17:03	1
Cadmium	0.0015	J	0.0020	0.00050	mg/L		01/29/15 07:40	01/29/15 14:30	1
Chromium	0.0067	B	0.0040	0.0010	mg/L		01/29/15 07:40	01/29/15 14:30	1
Lead	0.016		0.010	0.0030	mg/L		01/29/15 07:40	01/29/15 14:30	1
Selenium	ND		0.025	0.0087	mg/L		01/29/15 07:40	01/29/15 14:30	1
Silver	ND		0.0060	0.0017	mg/L		01/29/15 07:40	01/29/15 14:30	1

**Method: 7470A - TCLP Mercury - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/28/15 08:10	01/28/15 13:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10	0.0030	mg/Kg		01/26/15 01:45	01/27/15 07:55	1
Sulfide, Reactive	8.0	J	10	0.57	mg/Kg		01/26/15 01:45	01/27/15 08:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176.0		50.0	50.0	Degrees F			01/28/15 07:48	1
pH	9.27	HF	0.100	0.100	SU			01/29/15 10:40	1

# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T1-S**

**Lab Sample ID: 480-74590-5**

Date Collected: 01/21/15 08:09

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 92.8

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		980	300	mg/Kg	✱	01/26/15 08:58	01/27/15 03:27	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	0	X	48 - 125				01/26/15 08:58	01/27/15 03:27	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T2-S**

**Lab Sample ID: 480-74590-6**

**Date Collected: 01/21/15 08:23**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

**Percent Solids: 93.7**

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		970	290	mg/Kg	☼	01/26/15 08:58	01/27/15 04:01	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	0	X	48 - 125				01/26/15 08:58	01/27/15 04:01	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T3-S**

**Lab Sample ID: 480-74590-7**

Date Collected: 01/21/15 08:39

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 86.9

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>65</b>		38	11	mg/Kg	☼	01/26/15 08:58	01/28/15 15:41	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	63		48 - 125				01/26/15 08:58	01/28/15 15:41	2

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T4-S**

**Lab Sample ID: 480-74590-8**

**Date Collected: 01/21/15 08:59**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

**Percent Solids: 92.2**

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		720	220	mg/Kg	☼	01/26/15 08:58	01/27/15 05:43	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	0	X	48 - 125				01/26/15 08:58	01/27/15 05:43	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T5-S**

**Lab Sample ID: 480-74590-9**

Date Collected: 01/21/15 09:42

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 88.1

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		560	170	mg/Kg	☼	01/26/15 08:58	01/27/15 06:17	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	10	X	48 - 125				01/26/15 08:58	01/27/15 06:17	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T6-S**

**Lab Sample ID: 480-74590-10**

Date Collected: 01/21/15 09:51

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 91.6

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>250</b>		150	44	mg/Kg	☼	01/26/15 08:58	01/28/15 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	57		48 - 125				01/26/15 08:58	01/28/15 16:15	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-T7-S**

**Lab Sample ID: 480-74590-11**

Date Collected: 01/21/15 09:56

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 94.1

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>260</b>		170	52	mg/Kg	☼	01/26/15 08:58	01/28/15 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	51		48 - 125				01/26/15 08:58	01/28/15 16:49	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T1-S**

**Lab Sample ID: 480-74590-12**

**Date Collected: 01/21/15 10:52**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

**Percent Solids: 91.3**

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		180	55	mg/Kg	☼	01/26/15 08:58	01/27/15 02:53	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		48 - 125				01/26/15 08:58	01/27/15 02:53	10

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T2-S**

**Lab Sample ID: 480-74590-13**

Date Collected: 01/21/15 11:07

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 91.5

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>110</b>		91	27	mg/Kg	☼	01/26/15 08:58	01/28/15 17:23	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	44	X	48 - 125				01/26/15 08:58	01/28/15 17:23	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T3-S**

**Lab Sample ID: 480-74590-14**

Date Collected: 01/21/15 11:22

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 86.2

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>70</b>		38	11	mg/Kg	☼	01/26/15 08:58	01/28/15 17:57	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	61		48 - 125				01/26/15 08:58	01/28/15 17:57	2

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T4-S**

**Lab Sample ID: 480-74590-15**

Date Collected: 01/21/15 11:42

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.5

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>69</b>		18	5.5	mg/Kg	☼	01/26/15 08:58	01/29/15 10:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	115		48 - 125				01/26/15 08:58	01/29/15 10:29	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T5-S**

**Lab Sample ID: 480-74590-16**

Date Collected: 01/21/15 11:58

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 86.5

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>29</b>		19	5.7	mg/Kg	☼	01/26/15 08:58	01/28/15 19:05	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	59		48 - 125				01/26/15 08:58	01/28/15 19:05	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T6-S**

**Lab Sample ID: 480-74590-17**

Date Collected: 01/21/15 12:15

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.0

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>150</b>		91	27	mg/Kg	☼	01/26/15 08:58	01/27/15 10:49	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	66		48 - 125				01/26/15 08:58	01/27/15 10:49	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T7-S**

**Lab Sample ID: 480-74590-18**

Date Collected: 01/21/15 13:10

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.8

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>67</b>		18	5.5	mg/Kg	☼	01/26/15 08:58	01/29/15 11:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	83		48 - 125				01/26/15 08:58	01/29/15 11:03	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T8-S**

**Lab Sample ID: 480-74590-19**

Date Collected: 01/21/15 13:25

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.2

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	50		18	5.4	mg/Kg	☼	01/26/15 08:58	01/29/15 11:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		48 - 125				01/26/15 08:58	01/29/15 11:37	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T9-S**

**Lab Sample ID: 480-74590-20**

Date Collected: 01/21/15 13:42

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.0

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>77</b>		18	5.5	mg/Kg	☼	01/26/15 08:58	01/29/15 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		48 - 125				01/26/15 08:58	01/29/15 12:11	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T10-S**

**Lab Sample ID: 480-74590-21**

Date Collected: 01/21/15 13:55

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 88.1

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>45</b>		18	5.5	mg/Kg	☼	01/26/15 08:58	01/29/15 12:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	51		48 - 125				01/26/15 08:58	01/29/15 12:45	1

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T11-S**

**Lab Sample ID: 480-74590-22**

Date Collected: 01/21/15 14:11

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 89.0

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>43</b>		37	11	mg/Kg	☼	01/26/15 08:58	01/28/15 22:27	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	59		48 - 125				01/26/15 08:58	01/28/15 22:27	2

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T12-S**

**Lab Sample ID: 480-74590-23**

Date Collected: 01/21/15 14:22

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 88.3

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>60</b>		37	11	mg/Kg	☼	01/26/15 08:58	01/28/15 23:01	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	54		48 - 125				01/26/15 08:58	01/28/15 23:01	2

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T13-S**

**Lab Sample ID: 480-74590-24**

Date Collected: 01/21/15 14:34

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.8

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>110</b>		90	27	mg/Kg	☼	01/26/15 09:01	01/28/15 13:25	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	80		48 - 125				01/26/15 09:01	01/28/15 13:25	5

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T14-S**

**Lab Sample ID: 480-74590-25**

**Date Collected: 01/21/15 14:48**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

**Percent Solids: 85.4**

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		190	58	mg/Kg	☼	01/26/15 09:01	01/26/15 22:22	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		48 - 125				01/26/15 09:01	01/26/15 22:22	10

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-T15-S**

**Lab Sample ID: 480-74590-26**

Date Collected: 01/21/15 15:00

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 89.4

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>67</b>		37	11	mg/Kg	☼	01/26/15 09:01	01/28/15 23:35	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	62		48 - 125				01/26/15 09:01	01/28/15 23:35	2

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# Client Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP3-T1-S**

**Lab Sample ID: 480-74590-27**

Date Collected: 01/21/15 15:23

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 93.2

**Method: 8015D - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Petroleum Hydrocarbons (C10-C28)</b>	<b>61</b>		35	11	mg/Kg	☼	01/26/15 09:01	01/28/15 14:33	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	67		48 - 125				01/26/15 09:01	01/28/15 14:33	2

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# Surrogate Summary

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	OTPH (48-125)			
480-74590-5	AS-WC-SP1-T1-S	0 X			
480-74590-6	AS-WC-SP1-T2-S	0 X			
480-74590-7	AS-WC-SP1-T3-S	63			
480-74590-8	AS-WC-SP1-T4-S	0 X			
480-74590-9	AS-WC-SP1-T5-S	10 X			
480-74590-10	AS-WC-SP1-T6-S	57			
480-74590-11	AS-WC-SP1-T7-S	51			
480-74590-12	AS-WC-SP2-T1-S	66			
480-74590-12 MS	AS-WC-SP2-T1-S	84			
480-74590-12 MSD	AS-WC-SP2-T1-S	82			
480-74590-13	AS-WC-SP2-T2-S	44 X			
480-74590-14	AS-WC-SP2-T3-S	61			
480-74590-15	AS-WC-SP2-T4-S	115			
480-74590-16	AS-WC-SP2-T5-S	59			
480-74590-17	AS-WC-SP2-T6-S	66			
480-74590-18	AS-WC-SP2-T7-S	83			
480-74590-19	AS-WC-SP2-T8-S	87			
480-74590-20	AS-WC-SP2-T9-S	76			
480-74590-21	AS-WC-SP2-T10-S	51			
480-74590-22	AS-WC-SP2-T11-S	59			
480-74590-23	AS-WC-SP2-T12-S	54			
480-74590-24	AS-WC-SP2-T13-S	80			
480-74590-24 MS	AS-WC-SP2-T13-S	93			
480-74590-24 MSD	AS-WC-SP2-T13-S	270 X			
480-74590-25	AS-WC-SP2-T14-S	59			
480-74590-26	AS-WC-SP2-T15-S	62			
480-74590-27	AS-WC-SP3-T1-S	67			
LCS 480-224360/2-A	Lab Control Sample	104			
LCS 480-224361/2-A	Lab Control Sample	105			
MB 480-224360/1-A	Method Blank	82			
MB 480-224361/1-A	Method Blank	79			

**Surrogate Legend**

OTPH = o-Terphenyl

# QC Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Method: 8015D - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 480-224360/1-A**

**Matrix: Solid**

**Analysis Batch: 224484**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 224360**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		16	4.9	mg/Kg		01/26/15 08:58	01/27/15 00:38	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		48 - 125				01/26/15 08:58	01/27/15 00:38	1

**Lab Sample ID: LCS 480-224360/2-A**

**Matrix: Solid**

**Analysis Batch: 224484**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 224360**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Petroleum Hydrocarbons (C10-C28)	49.8	40.7		mg/Kg		82	63 - 127
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	104		48 - 125				

**Lab Sample ID: 480-74590-12 MS**

**Matrix: Solid**

**Analysis Batch: 224484**

**Client Sample ID: AS-WC-SP2-T1-S**

**Prep Type: Total/NA**

**Prep Batch: 224360**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Petroleum Hydrocarbons (C10-C28)	ND		54.6	ND		mg/Kg	☼	NC	43 - 153
Surrogate	%Recovery	MS Qualifier	Limits						
<i>o</i> -Terphenyl	84		48 - 125						

**Lab Sample ID: 480-74590-12 MSD**

**Matrix: Solid**

**Analysis Batch: 224484**

**Client Sample ID: AS-WC-SP2-T1-S**

**Prep Type: Total/NA**

**Prep Batch: 224360**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Petroleum Hydrocarbons (C10-C28)	ND		54.4	ND	F1	mg/Kg	☼	0	43 - 153	NC	35
Surrogate	%Recovery	MSD Qualifier	Limits								
<i>o</i> -Terphenyl	82		48 - 125								

**Lab Sample ID: MB 480-224361/1-A**

**Matrix: Solid**

**Analysis Batch: 224484**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 224361**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Petroleum Hydrocarbons (C10-C28)	ND		17	5.0	mg/Kg		01/26/15 09:01	01/26/15 19:32	1

TestAmerica Buffalo

# QC Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: MB 480-224361/1-A**  
**Matrix: Solid**  
**Analysis Batch: 224484**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 224361**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	79		48 - 125	01/26/15 09:01	01/26/15 19:32	1

**Lab Sample ID: LCS 480-224361/2-A**  
**Matrix: Solid**  
**Analysis Batch: 224484**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 224361**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Total Petroleum Hydrocarbons (C10-C28)	49.1	40.3		mg/Kg		82	63 - 127	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	105		48 - 125

**Lab Sample ID: 480-74590-24 MS**  
**Matrix: Solid**  
**Analysis Batch: 224665**

**Client Sample ID: AS-WC-SP2-T13-S**  
**Prep Type: Total/NA**  
**Prep Batch: 224361**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	
Total Petroleum Hydrocarbons (C10-C28)	110		54.6	165		mg/Kg	✱	95	43 - 153	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	93		48 - 125

**Lab Sample ID: 480-74590-24 MSD**  
**Matrix: Solid**  
**Analysis Batch: 224665**

**Client Sample ID: AS-WC-SP2-T13-S**  
**Prep Type: Total/NA**  
**Prep Batch: 224361**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
									Limits		RPD	Limit
Total Petroleum Hydrocarbons (C10-C28)	110		54.5	161		mg/Kg	✱	87	43 - 153	3	35	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	270	X	48 - 125

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 480-224829/2-A**  
**Matrix: Solid**  
**Analysis Batch: 225052**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 224829**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	ND		0.0020	0.00070	mg/L		01/29/15 07:40	01/29/15 15:49	1

TestAmerica Buffalo

# QC Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID:** LCS 480-224829/3-A  
**Matrix:** Solid  
**Analysis Batch:** 225052

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 224829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	1.00	0.983		mg/L		98	80 - 120

**Lab Sample ID:** LCSD 480-224829/4-A  
**Matrix:** Solid  
**Analysis Batch:** 225052

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 224829

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	1.00	0.938		mg/L		94	80 - 120	5	20

**Lab Sample ID:** LB 480-224354/1-F  
**Matrix:** Solid  
**Analysis Batch:** 225052

**Client Sample ID:** Method Blank  
**Prep Type:** TCLP  
**Prep Batch:** 224829

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.0557		0.0020	0.00070	mg/L		01/29/15 07:40	01/29/15 15:46	1

## Method: 7470A - TCLP Mercury

**Lab Sample ID:** MB 480-224603/2-A  
**Matrix:** Solid  
**Analysis Batch:** 224795

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 224603

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/28/15 08:10	01/28/15 12:41	1

**Lab Sample ID:** LCS 480-224603/3-A  
**Matrix:** Solid  
**Analysis Batch:** 224795

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 224603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00668	0.00542		mg/L		81	80 - 120

**Lab Sample ID:** LB 480-224354/1-D  
**Matrix:** Solid  
**Analysis Batch:** 224795

**Client Sample ID:** Method Blank  
**Prep Type:** TCLP  
**Prep Batch:** 224603

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		01/28/15 08:10	01/28/15 12:39	1

## Method: 1010A - Ignitability, Pensky-Martens Closed Cup Method

**Lab Sample ID:** LCS 480-224666/1  
**Matrix:** Solid  
**Analysis Batch:** 224666

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	80.00		Degrees F		99	97.5 - 102.5

TestAmerica Buffalo

# QC Sample Results

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Method: 1010A - Ignitability, Pensky-Martens Closed Cup Method (Continued)

Lab Sample ID: LCS 480-224830/1  
 Matrix: Solid  
 Analysis Batch: 224830

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	79.00		Degrees F		98	97.5 - 102.5

## Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 480-224365/1-A  
 Matrix: Solid  
 Analysis Batch: 224611

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 224365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0	0.0030	mg/Kg		01/26/15 01:45	01/27/15 07:55	1

Lab Sample ID: LCS 480-224365/2-A  
 Matrix: Solid  
 Analysis Batch: 224611

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 224365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Reactive	1000	197.5	J	mg/Kg		20	10 - 100

## Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 480-224367/1-A  
 Matrix: Solid  
 Analysis Batch: 224616

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 224367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		10.0	0.57	mg/Kg		01/26/15 01:45	01/27/15 08:30	1

Lab Sample ID: LCS 480-224367/2-A  
 Matrix: Solid  
 Analysis Batch: 224616

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 224367

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Reactive	1000	761.4		mg/Kg		76	10 - 100

## Method: 9045D - pH

Lab Sample ID: 480-74590-4 DU  
 Matrix: Solid  
 Analysis Batch: 224972

Client Sample ID: AS-WC-SP3-C2-S  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	9.27	HF	9.290		SU		0.2	5

TestAmerica Buffalo



# QC Association Summary

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## GC Semi VOA

### Prep Batch: 224360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-5	AS-WC-SP1-T1-S	Total/NA	Solid	3550C	
480-74590-6	AS-WC-SP1-T2-S	Total/NA	Solid	3550C	
480-74590-7	AS-WC-SP1-T3-S	Total/NA	Solid	3550C	
480-74590-8	AS-WC-SP1-T4-S	Total/NA	Solid	3550C	
480-74590-9	AS-WC-SP1-T5-S	Total/NA	Solid	3550C	
480-74590-10	AS-WC-SP1-T6-S	Total/NA	Solid	3550C	
480-74590-11	AS-WC-SP1-T7-S	Total/NA	Solid	3550C	
480-74590-12	AS-WC-SP2-T1-S	Total/NA	Solid	3550C	
480-74590-12 MS	AS-WC-SP2-T1-S	Total/NA	Solid	3550C	
480-74590-12 MSD	AS-WC-SP2-T1-S	Total/NA	Solid	3550C	
480-74590-13	AS-WC-SP2-T2-S	Total/NA	Solid	3550C	
480-74590-14	AS-WC-SP2-T3-S	Total/NA	Solid	3550C	
480-74590-15	AS-WC-SP2-T4-S	Total/NA	Solid	3550C	
480-74590-16	AS-WC-SP2-T5-S	Total/NA	Solid	3550C	
480-74590-17	AS-WC-SP2-T6-S	Total/NA	Solid	3550C	
480-74590-18	AS-WC-SP2-T7-S	Total/NA	Solid	3550C	
480-74590-19	AS-WC-SP2-T8-S	Total/NA	Solid	3550C	
480-74590-20	AS-WC-SP2-T9-S	Total/NA	Solid	3550C	
480-74590-21	AS-WC-SP2-T10-S	Total/NA	Solid	3550C	
480-74590-22	AS-WC-SP2-T11-S	Total/NA	Solid	3550C	
480-74590-23	AS-WC-SP2-T12-S	Total/NA	Solid	3550C	
LCS 480-224360/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-224360/1-A	Method Blank	Total/NA	Solid	3550C	

### Prep Batch: 224361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-24	AS-WC-SP2-T13-S	Total/NA	Solid	3550C	
480-74590-24 MS	AS-WC-SP2-T13-S	Total/NA	Solid	3550C	
480-74590-24 MSD	AS-WC-SP2-T13-S	Total/NA	Solid	3550C	
480-74590-25	AS-WC-SP2-T14-S	Total/NA	Solid	3550C	
480-74590-26	AS-WC-SP2-T15-S	Total/NA	Solid	3550C	
480-74590-27	AS-WC-SP3-T1-S	Total/NA	Solid	3550C	
LCS 480-224361/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-224361/1-A	Method Blank	Total/NA	Solid	3550C	

### Analysis Batch: 224484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-5	AS-WC-SP1-T1-S	Total/NA	Solid	8015D	224360
480-74590-6	AS-WC-SP1-T2-S	Total/NA	Solid	8015D	224360
480-74590-8	AS-WC-SP1-T4-S	Total/NA	Solid	8015D	224360
480-74590-9	AS-WC-SP1-T5-S	Total/NA	Solid	8015D	224360
480-74590-12	AS-WC-SP2-T1-S	Total/NA	Solid	8015D	224360
480-74590-12 MS	AS-WC-SP2-T1-S	Total/NA	Solid	8015D	224360
480-74590-12 MSD	AS-WC-SP2-T1-S	Total/NA	Solid	8015D	224360
480-74590-17	AS-WC-SP2-T6-S	Total/NA	Solid	8015D	224360
480-74590-25	AS-WC-SP2-T14-S	Total/NA	Solid	8015D	224361
LCS 480-224360/2-A	Lab Control Sample	Total/NA	Solid	8015D	224360
LCS 480-224361/2-A	Lab Control Sample	Total/NA	Solid	8015D	224361
MB 480-224360/1-A	Method Blank	Total/NA	Solid	8015D	224360
MB 480-224361/1-A	Method Blank	Total/NA	Solid	8015D	224361

TestAmerica Buffalo

# QC Association Summary

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## GC Semi VOA (Continued)

### Analysis Batch: 224665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-7	AS-WC-SP1-T3-S	Total/NA	Solid	8015D	224360
480-74590-10	AS-WC-SP1-T6-S	Total/NA	Solid	8015D	224360
480-74590-11	AS-WC-SP1-T7-S	Total/NA	Solid	8015D	224360
480-74590-13	AS-WC-SP2-T2-S	Total/NA	Solid	8015D	224360
480-74590-14	AS-WC-SP2-T3-S	Total/NA	Solid	8015D	224360
480-74590-16	AS-WC-SP2-T5-S	Total/NA	Solid	8015D	224360
480-74590-22	AS-WC-SP2-T11-S	Total/NA	Solid	8015D	224360
480-74590-23	AS-WC-SP2-T12-S	Total/NA	Solid	8015D	224360
480-74590-24	AS-WC-SP2-T13-S	Total/NA	Solid	8015D	224361
480-74590-24 MS	AS-WC-SP2-T13-S	Total/NA	Solid	8015D	224361
480-74590-24 MSD	AS-WC-SP2-T13-S	Total/NA	Solid	8015D	224361
480-74590-26	AS-WC-SP2-T15-S	Total/NA	Solid	8015D	224361
480-74590-27	AS-WC-SP3-T1-S	Total/NA	Solid	8015D	224361

### Analysis Batch: 224896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-15	AS-WC-SP2-T4-S	Total/NA	Solid	8015D	224360
480-74590-18	AS-WC-SP2-T7-S	Total/NA	Solid	8015D	224360
480-74590-19	AS-WC-SP2-T8-S	Total/NA	Solid	8015D	224360
480-74590-20	AS-WC-SP2-T9-S	Total/NA	Solid	8015D	224360
480-74590-21	AS-WC-SP2-T10-S	Total/NA	Solid	8015D	224360

## Metals

### Leach Batch: 224354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	TCLP	Solid	1311	
480-74590-2	AS-WC-SP2-C4-S	TCLP	Solid	1311	
480-74590-3	AS-WC-SP2-C5-S	TCLP	Solid	1311	
480-74590-4	AS-WC-SP3-C2-S	TCLP	Solid	1311	
LB 480-224354/1-D	Method Blank	TCLP	Solid	1311	
LB 480-224354/1-F	Method Blank	TCLP	Solid	1311	

### Prep Batch: 224603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	TCLP	Solid	7470A	224354
480-74590-2	AS-WC-SP2-C4-S	TCLP	Solid	7470A	224354
480-74590-3	AS-WC-SP2-C5-S	TCLP	Solid	7470A	224354
480-74590-4	AS-WC-SP3-C2-S	TCLP	Solid	7470A	224354
LB 480-224354/1-D	Method Blank	TCLP	Solid	7470A	224354
LCS 480-224603/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 480-224603/2-A	Method Blank	Total/NA	Solid	7470A	

### Analysis Batch: 224795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	TCLP	Solid	7470A	224603
480-74590-2	AS-WC-SP2-C4-S	TCLP	Solid	7470A	224603
480-74590-3	AS-WC-SP2-C5-S	TCLP	Solid	7470A	224603
480-74590-4	AS-WC-SP3-C2-S	TCLP	Solid	7470A	224603
LB 480-224354/1-D	Method Blank	TCLP	Solid	7470A	224603

TestAmerica Buffalo

# QC Association Summary

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Metals (Continued)

### Analysis Batch: 224795 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-224603/3-A	Lab Control Sample	Total/NA	Solid	7470A	224603
MB 480-224603/2-A	Method Blank	Total/NA	Solid	7470A	224603

### Prep Batch: 224829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	TCLP	Solid	3010A	224354
480-74590-2	AS-WC-SP2-C4-S	TCLP	Solid	3010A	224354
480-74590-3	AS-WC-SP2-C5-S	TCLP	Solid	3010A	224354
480-74590-4	AS-WC-SP3-C2-S	TCLP	Solid	3010A	224354
LB 480-224354/1-F	Method Blank	TCLP	Solid	3010A	224354
LCS 480-224829/3-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 480-224829/4-A	Lab Control Sample Dup	Total/NA	Solid	3010A	
MB 480-224829/2-A	Method Blank	Total/NA	Solid	3010A	

### Analysis Batch: 225052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	TCLP	Solid	6010C	224829
480-74590-1	AS-WC-SP1-C3-S	TCLP	Solid	6010C	224829
480-74590-2	AS-WC-SP2-C4-S	TCLP	Solid	6010C	224829
480-74590-2	AS-WC-SP2-C4-S	TCLP	Solid	6010C	224829
480-74590-3	AS-WC-SP2-C5-S	TCLP	Solid	6010C	224829
480-74590-3	AS-WC-SP2-C5-S	TCLP	Solid	6010C	224829
480-74590-4	AS-WC-SP3-C2-S	TCLP	Solid	6010C	224829
480-74590-4	AS-WC-SP3-C2-S	TCLP	Solid	6010C	224829
LB 480-224354/1-F	Method Blank	TCLP	Solid	6010C	224829
LCS 480-224829/3-A	Lab Control Sample	Total/NA	Solid	6010C	224829
LCSD 480-224829/4-A	Lab Control Sample Dup	Total/NA	Solid	6010C	224829
MB 480-224829/2-A	Method Blank	Total/NA	Solid	6010C	224829

## General Chemistry

### Analysis Batch: 224266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	Moisture	
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	Moisture	
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	Moisture	
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	Moisture	
480-74590-5	AS-WC-SP1-T1-S	Total/NA	Solid	Moisture	
480-74590-6	AS-WC-SP1-T2-S	Total/NA	Solid	Moisture	
480-74590-7	AS-WC-SP1-T3-S	Total/NA	Solid	Moisture	
480-74590-8	AS-WC-SP1-T4-S	Total/NA	Solid	Moisture	
480-74590-9	AS-WC-SP1-T5-S	Total/NA	Solid	Moisture	
480-74590-10	AS-WC-SP1-T6-S	Total/NA	Solid	Moisture	
480-74590-11	AS-WC-SP1-T7-S	Total/NA	Solid	Moisture	
480-74590-12	AS-WC-SP2-T1-S	Total/NA	Solid	Moisture	
480-74590-13	AS-WC-SP2-T2-S	Total/NA	Solid	Moisture	
480-74590-14	AS-WC-SP2-T3-S	Total/NA	Solid	Moisture	
480-74590-15	AS-WC-SP2-T4-S	Total/NA	Solid	Moisture	
480-74590-16	AS-WC-SP2-T5-S	Total/NA	Solid	Moisture	
480-74590-17	AS-WC-SP2-T6-S	Total/NA	Solid	Moisture	

TestAmerica Buffalo

# QC Association Summary

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## General Chemistry (Continued)

### Analysis Batch: 224266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-18	AS-WC-SP2-T7-S	Total/NA	Solid	Moisture	
480-74590-19	AS-WC-SP2-T8-S	Total/NA	Solid	Moisture	
480-74590-20	AS-WC-SP2-T9-S	Total/NA	Solid	Moisture	
480-74590-21	AS-WC-SP2-T10-S	Total/NA	Solid	Moisture	
480-74590-22	AS-WC-SP2-T11-S	Total/NA	Solid	Moisture	
480-74590-23	AS-WC-SP2-T12-S	Total/NA	Solid	Moisture	
480-74590-24	AS-WC-SP2-T13-S	Total/NA	Solid	Moisture	
480-74590-25	AS-WC-SP2-T14-S	Total/NA	Solid	Moisture	
480-74590-26	AS-WC-SP2-T15-S	Total/NA	Solid	Moisture	
480-74590-27	AS-WC-SP3-T1-S	Total/NA	Solid	Moisture	

### Prep Batch: 224365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	7.3.3	
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	7.3.3	
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	7.3.3	
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	7.3.3	
LCS 480-224365/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	
MB 480-224365/1-A	Method Blank	Total/NA	Solid	7.3.3	

### Prep Batch: 224367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	7.3.4	
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	7.3.4	
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	7.3.4	
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	7.3.4	
LCS 480-224367/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
MB 480-224367/1-A	Method Blank	Total/NA	Solid	7.3.4	

### Analysis Batch: 224611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	9012	224365
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	9012	224365
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	9012	224365
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	9012	224365
LCS 480-224365/2-A	Lab Control Sample	Total/NA	Solid	9012	224365
MB 480-224365/1-A	Method Blank	Total/NA	Solid	9012	224365

### Analysis Batch: 224616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	9034	224367
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	9034	224367
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	9034	224367
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	9034	224367
LCS 480-224367/2-A	Lab Control Sample	Total/NA	Solid	9034	224367
MB 480-224367/1-A	Method Blank	Total/NA	Solid	9034	224367

### Analysis Batch: 224666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	1010A	
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	1010A	

TestAmerica Buffalo

# QC Association Summary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## General Chemistry (Continued)

### Analysis Batch: 224666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-224666/1	Lab Control Sample	Total/NA	Solid	1010A	

### Analysis Batch: 224830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	1010A	
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	1010A	
LCS 480-224830/1	Lab Control Sample	Total/NA	Solid	1010A	

### Analysis Batch: 224972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-74590-1	AS-WC-SP1-C3-S	Total/NA	Solid	9045D	
480-74590-2	AS-WC-SP2-C4-S	Total/NA	Solid	9045D	
480-74590-3	AS-WC-SP2-C5-S	Total/NA	Solid	9045D	
480-74590-4	AS-WC-SP3-C2-S	Total/NA	Solid	9045D	
480-74590-4 DU	AS-WC-SP3-C2-S	Total/NA	Solid	9045D	
LCS 480-224972/1	Lab Control Sample	Total/NA	Solid	9045D	

# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP1-C3-S**

**Lab Sample ID: 480-74590-1**

**Date Collected: 01/21/15 09:50**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 14:21	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 16:46	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	7470A			224603	01/28/15 08:10	LRK	TAL BUF
TCLP	Analysis	7470A		1	224795	01/28/15 12:53	LRK	TAL BUF
Total/NA	Analysis	1010A		1	224666	01/27/15 08:55	RP	TAL BUF
Total/NA	Prep	7.3.3			224365	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9012		1	224611	01/27/15 07:55	LAW	TAL BUF
Total/NA	Prep	7.3.4			224367	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9034		1	224616	01/27/15 08:30	LAW	TAL BUF
Total/NA	Analysis	9045D		1	224972	01/29/15 10:40	MDL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

**Client Sample ID: AS-WC-SP2-C4-S**

**Lab Sample ID: 480-74590-2**

**Date Collected: 01/21/15 13:25**

**Matrix: Solid**

**Date Received: 01/23/15 09:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 14:24	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 16:57	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	7470A			224603	01/28/15 08:10	LRK	TAL BUF
TCLP	Analysis	7470A		1	224795	01/28/15 12:54	LRK	TAL BUF
Total/NA	Analysis	1010A		1	224666	01/27/15 08:55	RP	TAL BUF
Total/NA	Prep	7.3.3			224365	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9012		1	224611	01/27/15 07:55	LAW	TAL BUF
Total/NA	Prep	7.3.4			224367	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9034		1	224616	01/27/15 08:30	LAW	TAL BUF
Total/NA	Analysis	9045D		1	224972	01/29/15 10:40	MDL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

**Client Sample ID: AS-WC-SP2-C5-S**

**Lab Sample ID: 480-74590-3**

Date Collected: 01/21/15 15:00

Matrix: Solid

Date Received: 01/23/15 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 14:27	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 17:00	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	7470A			224603	01/28/15 08:10	LRK	TAL BUF
TCLP	Analysis	7470A		1	224795	01/28/15 12:59	LRK	TAL BUF
Total/NA	Analysis	1010A		1	224830	01/28/15 07:48	RP	TAL BUF
Total/NA	Prep	7.3.3			224365	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9012		1	224611	01/27/15 07:55	LAW	TAL BUF
Total/NA	Prep	7.3.4			224367	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9034		1	224616	01/27/15 08:30	LAW	TAL BUF
Total/NA	Analysis	9045D		1	224972	01/29/15 10:40	MDL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

**Client Sample ID: AS-WC-SP3-C2-S**

**Lab Sample ID: 480-74590-4**

Date Collected: 01/21/15 15:25

Matrix: Solid

Date Received: 01/23/15 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 14:30	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	3010A			224829	01/29/15 07:40	TAS	TAL BUF
TCLP	Analysis	6010C		1	225052	01/29/15 17:03	AMH	TAL BUF
TCLP	Leach	1311			224354	01/26/15 08:30	TRG	TAL BUF
TCLP	Prep	7470A			224603	01/28/15 08:10	LRK	TAL BUF
TCLP	Analysis	7470A		1	224795	01/28/15 13:01	LRK	TAL BUF
Total/NA	Analysis	1010A		1	224830	01/28/15 07:48	RP	TAL BUF
Total/NA	Prep	7.3.3			224365	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9012		1	224611	01/27/15 07:55	LAW	TAL BUF
Total/NA	Prep	7.3.4			224367	01/26/15 01:45	LAW	TAL BUF
Total/NA	Analysis	9034		1	224616	01/27/15 08:30	LAW	TAL BUF
Total/NA	Analysis	9045D		1	224972	01/29/15 10:40	MDL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP1-T1-S

Lab Sample ID: 480-74590-5

Date Collected: 01/21/15 08:09

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224484	01/27/15 03:27	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP1-T2-S

Lab Sample ID: 480-74590-6

Date Collected: 01/21/15 08:23

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224484	01/27/15 04:01	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP1-T3-S

Lab Sample ID: 480-74590-7

Date Collected: 01/21/15 08:39

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		2	224665	01/28/15 15:41	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP1-T4-S

Lab Sample ID: 480-74590-8

Date Collected: 01/21/15 08:59

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224484	01/27/15 05:43	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP1-T5-S

Lab Sample ID: 480-74590-9

Date Collected: 01/21/15 09:42

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224484	01/27/15 06:17	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

TestAmerica Buffalo



# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP1-T6-S

Lab Sample ID: 480-74590-10

Date Collected: 01/21/15 09:51

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224665	01/28/15 16:15	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP1-T7-S

Lab Sample ID: 480-74590-11

Date Collected: 01/21/15 09:56

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224665	01/28/15 16:49	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T1-S

Lab Sample ID: 480-74590-12

Date Collected: 01/21/15 10:52

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		10	224484	01/27/15 02:53	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T2-S

Lab Sample ID: 480-74590-13

Date Collected: 01/21/15 11:07

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224665	01/28/15 17:23	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T3-S

Lab Sample ID: 480-74590-14

Date Collected: 01/21/15 11:22

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		2	224665	01/28/15 17:57	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

TestAmerica Buffalo

# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP2-T4-S

Lab Sample ID: 480-74590-15

Date Collected: 01/21/15 11:42

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224896	01/29/15 10:29	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T5-S

Lab Sample ID: 480-74590-16

Date Collected: 01/21/15 11:58

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224665	01/28/15 19:05	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T6-S

Lab Sample ID: 480-74590-17

Date Collected: 01/21/15 12:15

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224484	01/27/15 10:49	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T7-S

Lab Sample ID: 480-74590-18

Date Collected: 01/21/15 13:10

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224896	01/29/15 11:03	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T8-S

Lab Sample ID: 480-74590-19

Date Collected: 01/21/15 13:25

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224896	01/29/15 11:37	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

TestAmerica Buffalo

# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP2-T9-S

Lab Sample ID: 480-74590-20

Date Collected: 01/21/15 13:42

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224896	01/29/15 12:11	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T10-S

Lab Sample ID: 480-74590-21

Date Collected: 01/21/15 13:55

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		1	224896	01/29/15 12:45	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T11-S

Lab Sample ID: 480-74590-22

Date Collected: 01/21/15 14:11

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		2	224665	01/28/15 22:27	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T12-S

Lab Sample ID: 480-74590-23

Date Collected: 01/21/15 14:22

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224360	01/26/15 08:58	CAM	TAL BUF
Total/NA	Analysis	8015D		2	224665	01/28/15 23:01	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T13-S

Lab Sample ID: 480-74590-24

Date Collected: 01/21/15 14:34

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224361	01/26/15 09:01	CAM	TAL BUF
Total/NA	Analysis	8015D		5	224665	01/28/15 13:25	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

TestAmerica Buffalo

# Lab Chronicle

Client: Stantec Consulting Services Inc  
 Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Client Sample ID: AS-WC-SP2-T14-S

Lab Sample ID: 480-74590-25

Date Collected: 01/21/15 14:48

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224361	01/26/15 09:01	CAM	TAL BUF
Total/NA	Analysis	8015D		10	224484	01/26/15 22:22	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP2-T15-S

Lab Sample ID: 480-74590-26

Date Collected: 01/21/15 15:00

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224361	01/26/15 09:01	CAM	TAL BUF
Total/NA	Analysis	8015D		2	224665	01/28/15 23:35	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

## Client Sample ID: AS-WC-SP3-T1-S

Lab Sample ID: 480-74590-27

Date Collected: 01/21/15 15:23

Matrix: Solid

Date Received: 01/23/15 09:00

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			224361	01/26/15 09:01	CAM	TAL BUF
Total/NA	Analysis	8015D		2	224665	01/28/15 14:33	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	224266	01/23/15 21:24	CMK	TAL BUF

**Laboratory References:**

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Certification Summary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

## Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15 *

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
7470A	7470A	Solid	Mercury
9012	7.3.3	Solid	Cyanide, Reactive
9034	7.3.4	Solid	Sulfide, Reactive
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

\* Certification renewal pending - certification considered valid.

# Method Summary

Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

Method	Method Description	Protocol	Laboratory
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF
1010A	Ignitability, Pensky-Martens Closed Cup Method	SW846	TAL BUF
9012	Cyanide, Reactive	SW846	TAL BUF
9034	Sulfide, Reactive	SW846	TAL BUF
9045D	pH	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

**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 BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary


Client: Stantec Consulting Services Inc  
Project/Site: Astoria Steel - Waste Characterization

TestAmerica Job ID: 480-74590-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-74590-1	AS-WC-SP1-C3-S	Solid	01/21/15 09:50	01/23/15 09:00
480-74590-2	AS-WC-SP2-C4-S	Solid	01/21/15 13:25	01/23/15 09:00
480-74590-3	AS-WC-SP2-C5-S	Solid	01/21/15 15:00	01/23/15 09:00
480-74590-4	AS-WC-SP3-C2-S	Solid	01/21/15 15:25	01/23/15 09:00
480-74590-5	AS-WC-SP1-T1-S	Solid	01/21/15 08:09	01/23/15 09:00
480-74590-6	AS-WC-SP1-T2-S	Solid	01/21/15 08:23	01/23/15 09:00
480-74590-7	AS-WC-SP1-T3-S	Solid	01/21/15 08:39	01/23/15 09:00
480-74590-8	AS-WC-SP1-T4-S	Solid	01/21/15 08:59	01/23/15 09:00
480-74590-9	AS-WC-SP1-T5-S	Solid	01/21/15 09:42	01/23/15 09:00
480-74590-10	AS-WC-SP1-T6-S	Solid	01/21/15 09:51	01/23/15 09:00
480-74590-11	AS-WC-SP1-T7-S	Solid	01/21/15 09:56	01/23/15 09:00
480-74590-12	AS-WC-SP2-T1-S	Solid	01/21/15 10:52	01/23/15 09:00
480-74590-13	AS-WC-SP2-T2-S	Solid	01/21/15 11:07	01/23/15 09:00
480-74590-14	AS-WC-SP2-T3-S	Solid	01/21/15 11:22	01/23/15 09:00
480-74590-15	AS-WC-SP2-T4-S	Solid	01/21/15 11:42	01/23/15 09:00
480-74590-16	AS-WC-SP2-T5-S	Solid	01/21/15 11:58	01/23/15 09:00
480-74590-17	AS-WC-SP2-T6-S	Solid	01/21/15 12:15	01/23/15 09:00
480-74590-18	AS-WC-SP2-T7-S	Solid	01/21/15 13:10	01/23/15 09:00
480-74590-19	AS-WC-SP2-T8-S	Solid	01/21/15 13:25	01/23/15 09:00
480-74590-20	AS-WC-SP2-T9-S	Solid	01/21/15 13:42	01/23/15 09:00
480-74590-21	AS-WC-SP2-T10-S	Solid	01/21/15 13:55	01/23/15 09:00
480-74590-22	AS-WC-SP2-T11-S	Solid	01/21/15 14:11	01/23/15 09:00
480-74590-23	AS-WC-SP2-T12-S	Solid	01/21/15 14:22	01/23/15 09:00
480-74590-24	AS-WC-SP2-T13-S	Solid	01/21/15 14:34	01/23/15 09:00
480-74590-25	AS-WC-SP2-T14-S	Solid	01/21/15 14:48	01/23/15 09:00
480-74590-26	AS-WC-SP2-T15-S	Solid	01/21/15 15:00	01/23/15 09:00
480-74590-27	AS-WC-SP3-T1-S	Solid	01/21/15 15:23	01/23/15 09:00

**Chain of Custody Record**

10 Hazelwood Drive  
Amherst, NY 14228-2298  
Phone (716) 691-2600 Fax (716) 691-7991

<b>Client Information</b>		Lab P/N: VanDette, Ryan T		Carrier Tracking No(s):		COC No: 480-62321-14629.1	
Client Contact: Katie Premo		E-Mail: ryan.vandette@testamericainc.com		Page: Page 1		Job #:	
Company: Stantec Consulting Corp.		Address: 81 Commercial Street, Rochester, NY, 14614		Due Date Requested:		Analysis Requested	
PO #: 585-413-5620(Tel)		Purchase Order not required		TAT Requested (days): 5 days		Preservation Codes:	
WO #: 10137		Project #: 48008308		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		A - HCL, M - Hexamé	
E-mail: katie.premo@stantec.com		Project #: 48008308		Sample Type (C=comp, G=grab)		B - NaOH, N - None	
Project Name: Astoria Steel		Site: 480-74590 Chain of Custody		Sample Time		C - Zn Acetate, O - AsNaO2	
Barcode: 		Sample Date		Sample Time		P - Na2O4S, Q - Na2SO3	
Sample ID		Sample Date		Sample Time		R - Na2S2O3, S - H2SO4	
AS-WC-SP1-C3-S		1/21/15		0950		T - TSP Dodecylhydrate	
AS-WC-SP2-C4-S		1/21/15		1525		U - Acetone, V - MCAA	
AS-WC-SP2-C5-S		1/21/15		1500		W - ph 4-5, Z - other (specify)	
AS-WC-SP3-C2-S		1/21/15		1525		Other:	
AS-WC-SP1-T1-S		1/21/15		0809		Total Number of Containers	
AS-WC-SP1-T2-S		1/21/15		0823		Special Instructions/Note:	
AS-WC-SP1-T3-S		1/21/15		0839			
AS-WC-SP1-T4-S		1/21/15		0859			
AS-WC-SP1-T5-S		1/21/15		0942			
AS-WC-SP1-T6-S		1/21/15		0951			
AS-WC-SP1-T7-S		1/21/15		0956			
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant	
		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)		Leve II and NYSDEC Equis 4 File EFWEDD		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by:		Date:		Method of Shipment:			
Relinquished by: Andrew Schweitzer		Date/Time: 1/21/15 0950		Company: Stantec		Date/Time: 1/23/15 9:00	
Relinquished by: B.Samie		Date/Time: 01-22-15 / 17:00		Company: T.A.		Date/Time: 1-23-15 9:00	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: # 1 5.6, 13.0					



**Chain of Custody Record**

10 Hazelwood Drive  
Amherst, NY 14228-2298  
Phone (716) 691-2600 Fax (716) 691-7991

**Client Information**  
 Client Contact: *Katie Premo*  
 Phone: *347-921-2539*  
 Company: *Andrew Schweitzer*  
 Lab PM: *VanDette, Ryan T*  
 Carrier Tracking No(s):  
 COC No: 480-62321-14629-1  
 Page: Page 2  
 Job #:

**Analysis Requested**

Address: 61 Commercial Street  
 City: Rochester  
 State, Zip: NY, 14614  
 Phone: 585-413-5620(Tel)  
 PO #: Purchase Order not required  
 WO #: 10137  
 Email: *katie.premo@stamtec.com*  
 Project Name: Astoria Steel  
 Project #: 48008308  
 SSO#:   
 Due Date Requested:  
 TAT Requested (days): 5 days

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wast/oil, etc. Tissue, A=AU)	Field Filtered Sample (Yes or No)	9012, ReactiveCN, 9034, Reactive	6010C, 7470A	1010A, 9046D	2540G - (MOD) Local Method	Analysis Requested	Carrier Tracking No(s)	COC No
AS-WC-SP2-T1-S	1/21/15	1052	C	Solid	MM	N	N	N	X			480-62321-14629-1
AS-WC-SP2-T2-S	1/21/15	1107	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T3-S	1/21/15	1122	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T4-S	1/21/15	1142	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T5-S	1/21/15	1158	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T6-S	1/21/15	1215	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T7-S	1/21/15	1310	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T8-S	1/21/15	1325	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T9-S	1/21/15	1342	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T10-S	1/21/15	1355	C	Solid	MM	N	N	N	X			
AS-WC-SP2-T11-S	1/21/15	1411	C	Solid	MM	N	N	N	X			

**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological  
 Deliverable Requested: I, II, III, IV, Other (specify)  
 Level II and NYSDEC Equis 4 File EFWEDD

**Special Instructions/Note:**

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  
 Other:  
 M - Hexane  
 N - None  
 O - AsNaO2  
 P - Na2O4S  
 Q - Na2SO3  
 R - Na2S2O3  
 S - H2SO4  
 T - TSP Dodecahydrate  
 U - Acetone  
 V - MCAA  
 W - ph 4-5  
 X - EDTA  
 Y - EDA  
 Z - other (specify)

Special Instructions/Note:  
 Total Number of Containers: 11

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: *Andrew Schweitzer / Andrew Schweitzer* Date/Time: *1/22/15 0930* Company: *Stamtec*  
 Relinquished by: *B. Sommi* Date/Time: *01-22-15 / 17.00* Company: *T.A.*  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Custody Seals Intact:  Custody Seal No.: \_\_\_\_\_  
 Cooler Temperature(s) °C and Other Remarks: *#1 3.2, 3.0, 2.8*

# Chain of Custody Record

10 Hazelwood Drive  
Amherst, NY 14228-2298  
Phone (716) 691-2600 Fax (716) 691-7991

<b>Client Information</b>	Sampler: <i>Andrew Schweitzer</i> Phone: 347-421-2539 Lab PM: VanDette, Ryan T E-Mail: ryan.vandette@testamericainc.com	Carrier Tracking No(s): COC No: 480-62321-14629.1 Page: Page 3 Job #:									
Company: Stantec Consulting Corp. Address: 61 Commercial Street City: Rochester State, Zip: NY, 14614 Phone: 585-413-5620 (Tel) Email: katie.premo@stantec.com Project Name: Astoria Steel Site:	Due Date Requested: TAT Requested (days): 5 days PO #: Purchase Order not required WO #: 10137 Project #: 48008308 SSOW#:	Analysis Requested 9012 ReactiveCN, 9034_ Reactive 6010C, 7470A 1010A, 9045D 2640G - (MOD) Local Method	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 Other: M - Hexane N - None O - ASNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)								
<b>Special Instructions/Note:</b>											
<b>Sample Identification</b>	<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=grab)</b>	<b>Matrix (W=water, S=solid, O=wasteball, BT=Tissue, A=sp)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Performs MSD (Yes or No)</b>	<b>9012 ReactiveCN, 9034_ Reactive</b>	<b>6010C, 7470A</b>	<b>1010A, 9045D</b>	<b>2640G - (MOD) Local Method</b>	<b>Total Number of Containers</b>
AS-WC-SP2-T12-S	1/21/15	1932	C	Solid	X	N					1
AS-WC-SP2-T13-S	1/21/15	1934	C	Solid	X	M					1
AS-WC-SP2-T14-S	1/21/15	1948	C	Solid	X	M					1
AS-WC-SP2-T15-S	1/21/15	1500	C	Solid	X	M					1
AS-WC-SP3-T1-S	1/21/15	1523	C	Solid	X	M					1
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) Leve II and NYSDEC Equis 4 File EFWEDD											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements:											
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>Andrew Schweitzer</i> Date/Time: 1/22/15 09:30 Company: <i>stantec</i> Relinquished by: <i>S. Somani</i> Date/Time: 01-22-15 / 17:00 Company: <i>T.A.</i> Relinquished by: _____ Date/Time: _____ Company: _____											
Custody Seals Intact: <input type="checkbox"/> Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: <i>F1 3.2, 3.0</i>											

## Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 480-74590-1

**Login Number: 74590**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robison, Zachary J**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	STANTEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

