

Appendix F

Verification Samples Laboratory Analytical Reports

Materials Storage Building

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40745-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/23/2013 12:25:57 PM

Kristine Allen, Project Manager I
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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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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Job ID: 580-40745-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/8/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

GC Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			10/08/13 16:51	1
Percent Moisture	15		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			10/08/13 16:51	1
Percent Moisture	14		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/08/13 16:51	1
Percent Moisture	11		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/08/13 16:51	1
Percent Moisture	9.4		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10		%			10/08/13 16:51	1
Percent Moisture	2.4		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/08/13 16:51	1
Percent Moisture	11		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			10/08/13 16:51	1
Percent Moisture	6.0		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/08/13 16:51	1
Percent Moisture	11		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/08/13 16:51	1
Percent Moisture	10		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			10/08/13 16:51	1
Percent Moisture	6.8		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			10/08/13 16:51	1
Percent Moisture	5.9		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-RB1-100713

Lab Sample ID: 580-40745-12

Date Collected: 10/07/13 15:15

Matrix: Water

Date Received: 10/07/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/10/13 13:21	10/10/13 19:04	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/10/13 13:21	10/10/13 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	79		50 - 150				10/10/13 13:21	10/10/13 19:04	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:13	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:13	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:13	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:13	5



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW1-100713

Lab Sample ID: 580-40745-13

Date Collected: 10/07/13 10:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.8		0.42		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10
Barium	95		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10
Cadmium	ND		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10
Chromium	6.6		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/09/13 12:17	1
Percent Moisture	11		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW2-100713

Lab Sample ID: 580-40745-14

Date Collected: 10/07/13 11:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9		0.46		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10
Barium	76		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10
Cadmium	0.22		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10
Chromium	4.7		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/09/13 12:17	1
Percent Moisture	9.2		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW3-100713

Lab Sample ID: 580-40745-15

Date Collected: 10/07/13 12:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.41		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10
Barium	95		0.16		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10
Cadmium	0.36		0.16		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10
Chromium	6.5		0.16		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/09/13 12:17	1
Percent Moisture	8.2		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW4-100713

Lab Sample ID: 580-40745-16

Date Collected: 10/07/13 13:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 79.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.54		mg/Kg	☆	10/21/13 10:36	10/21/13 18:10	10
Barium	390		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 18:10	10
Cadmium	0.38		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 18:10	10
Chromium	16		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 18:10	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			10/09/13 12:17	1
Percent Moisture	20		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS1-100713

Lab Sample ID: 580-40745-17

Date Collected: 10/07/13 10:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.0		0.57		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10
Barium	170		0.23		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10
Cadmium	ND		0.23		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10
Chromium	14		0.23		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			10/09/13 12:17	1
Percent Moisture	15		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS2-100713

Lab Sample ID: 580-40745-18

Date Collected: 10/07/13 12:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.9		0.46		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10
Barium	84		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10
Cadmium	0.21		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10
Chromium	16		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/09/13 12:17	1
Percent Moisture	8.3		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS3-100713

Lab Sample ID: 580-40745-19

Date Collected: 10/07/13 13:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.8		0.45		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10
Barium	100		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10
Cadmium	0.29		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10
Chromium	18		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/09/13 12:17	1
Percent Moisture	12		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS4-100713

Lab Sample ID: 580-40745-20

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		0.48		mg/Kg	☆	10/21/13 10:36	10/21/13 17:52	10
Barium	110		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:52	10
Cadmium	0.29		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:52	10
Chromium	17		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:52	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/09/13 12:17	1
Percent Moisture	11		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS104-100713

Lab Sample ID: 580-40745-21

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.51		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10
Barium	93		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10
Cadmium	0.23		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10
Chromium	15		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/09/13 12:17	1
Percent Moisture	12		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-RB1-100713

Lab Sample ID: 580-40745-22

Date Collected: 10/07/13 13:30

Matrix: Water

Date Received: 10/07/13 16:15

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:18	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:18	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:18	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:18	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146989/1-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146989

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/10/13 13:21	10/10/13 17:35	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/10/13 13:21	10/10/13 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/10/13 13:21	10/10/13 17:35	1

Lab Sample ID: LCS 580-146989/2-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.46		mg/L		87	70 - 130
Motor Oil (>C24-C36)	4.00	4.10		mg/L		103	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
<i>o</i> -Terphenyl	84		50 - 150				

Lab Sample ID: LCSD 580-146989/3-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.39		mg/L		85	70 - 130	2	30
Motor Oil (>C24-C36)	4.00	4.07		mg/L		102	70 - 130	1	30
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	78		50 - 150						

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147654/23-A
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147654

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Barium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Cadmium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Chromium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10

Lab Sample ID: LCS 580-147654/24-A
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	197		mg/Kg		98	80 - 120
Barium	200	192		mg/Kg		96	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-147654/24-A
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.00	4.83		mg/Kg		97	80 - 120
Chromium	20.0	19.2		mg/Kg		96	80 - 120

Lab Sample ID: LCSD 580-147654/25-A
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	197		mg/Kg		99	80 - 120	0	20
Barium	200	193		mg/Kg		96	80 - 120	0	20
Cadmium	5.00	4.73		mg/Kg		95	80 - 120	2	20
Chromium	20.0	19.5		mg/Kg		98	80 - 120	2	20

Lab Sample ID: 580-40745-13 MS
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: YO-SW1-100713
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.8		176	185		mg/Kg	☼	103	80 - 120
Barium	95		176	263		mg/Kg	☼	96	80 - 120
Cadmium	ND		4.40	4.57		mg/Kg	☼	101	80 - 120
Chromium	6.6		17.6	23.7		mg/Kg	☼	97	80 - 120

Lab Sample ID: 580-40745-13 MSD
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: YO-SW1-100713
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	3.8		174	184		mg/Kg	☼	104	80 - 120	0	20
Barium	95		174	283		mg/Kg	☼	109	80 - 120	7	20
Cadmium	ND		4.34	4.46		mg/Kg	☼	99	80 - 120	3	20
Chromium	6.6		17.4	24.5		mg/Kg	☼	103	80 - 120	3	20

Lab Sample ID: 580-40745-13 DU
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: YO-SW1-100713
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	3.8		3.54		mg/Kg	☼	6	20
Barium	95		88.8		mg/Kg	☼	6	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	6.6		6.20		mg/Kg	☼	7	20

Lab Sample ID: MB 580-147239/19-A
Matrix: Water
Analysis Batch: 147327

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 147239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 18:17	5

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-147239/19-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 18:17	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5

Lab Sample ID: LCS 580-147239/20-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.04		mg/L		101	80 - 120
Barium	4.00	3.96		mg/L		99	80 - 120
Cadmium	0.100	0.0951		mg/L		95	80 - 120
Chromium	0.400	0.389		mg/L		97	80 - 120

Lab Sample ID: LCSD 580-147239/21-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.08		mg/L		102	80 - 120	1	20
Barium	4.00	3.99		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.0952		mg/L		95	80 - 120	0	20
Chromium	0.400	0.389		mg/L		97	80 - 120	0	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40745-13 DU

Matrix: Solid

Analysis Batch: 146878

Client Sample ID: YO-SW1-100713

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.3	20
Percent Moisture	11		11		%		3	20

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-RB1-100713

Lab Sample ID: 580-40745-12

Date Collected: 10/07/13 15:15

Matrix: Water

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146989	10/10/13 13:21	RBL	TAL SEA
Total/NA	Cleanup	3630C			147004	10/10/13 16:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146943	10/10/13 19:04	JL1	TAL SEA
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:13	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW1-100713

Lab Sample ID: 580-40745-13

Date Collected: 10/07/13 10:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 15:40	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-SW2-100713

Lab Sample ID: 580-40745-14

Date Collected: 10/07/13 11:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:01	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-SW3-100713

Lab Sample ID: 580-40745-15

Date Collected: 10/07/13 12:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 18:01	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-SW4-100713

Lab Sample ID: 580-40745-16

Date Collected: 10/07/13 13:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 18:10	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS1-100713

Lab Sample ID: 580-40745-17

Date Collected: 10/07/13 10:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:10	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS2-100713

Lab Sample ID: 580-40745-18

Date Collected: 10/07/13 12:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:18	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS3-100713

Lab Sample ID: 580-40745-19

Date Collected: 10/07/13 13:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS4-100713

Lab Sample ID: 580-40745-20

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:52	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS104-100713

Lab Sample ID: 580-40745-21

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-RB1-100713

Lab Sample ID: 580-40745-22

Date Collected: 10/07/13 13:30

Matrix: Water

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:18	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40745-1	MSB-SW1-100713	Solid	10/07/13 09:45	10/07/13 16:15
580-40745-2	MSB-SW2-100713	Solid	10/07/13 09:50	10/07/13 16:15
580-40745-3	MSB-SW3-100713	Solid	10/07/13 09:55	10/07/13 16:15
580-40745-4	MSB-SW4-100713	Solid	10/07/13 11:05	10/07/13 16:15
580-40745-5	MSB-SW5-100713	Solid	10/07/13 11:10	10/07/13 16:15
580-40745-6	MSB-SW6-100713	Solid	10/07/13 13:30	10/07/13 16:15
580-40745-7	MSB-SW7-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-8	MSB-BS1-100713	Solid	10/07/13 10:05	10/07/13 16:15
580-40745-9	MSB-BS2-100713	Solid	10/07/13 10:15	10/07/13 16:15
580-40745-10	MSB-BS3-100713	Solid	10/07/13 11:00	10/07/13 16:15
580-40745-11	MSB-BS4-100713	Solid	10/07/13 13:35	10/07/13 16:15
580-40745-12	MSB-RB1-100713	Water	10/07/13 15:15	10/07/13 16:15
580-40745-13	YO-SW1-100713	Solid	10/07/13 10:45	10/07/13 16:15
580-40745-14	YO-SW2-100713	Solid	10/07/13 11:55	10/07/13 16:15
580-40745-15	YO-SW3-100713	Solid	10/07/13 12:05	10/07/13 16:15
580-40745-16	YO-SW4-100713	Solid	10/07/13 13:15	10/07/13 16:15
580-40745-17	YO-BS1-100713	Solid	10/07/13 10:50	10/07/13 16:15
580-40745-18	YO-BS2-100713	Solid	10/07/13 12:00	10/07/13 16:15
580-40745-19	YO-BS3-100713	Solid	10/07/13 13:10	10/07/13 16:15
580-40745-20	YO-BS4-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-21	YO-BS104-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-22	YO-RB1-100713	Water	10/07/13 13:30	10/07/13 16:15

TestAmerica Seattle
5755 8th Street East

Chain of Custody Record



Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW WPPES RCRA OMSCA APCA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact: **Bruce Sheppard** Project Manager: **Howard Young** Site Contact: **Howard Young** Date: **10/27/13** Carrier: **10/27/13** GOC No. **1** of **2** CDCs

Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
TAT if different from Below: 3 day
 2 weeks 1 week 2 days 1 day

Project Name: **Parkwater RA**
Site: **Parkwater, Spokane, WA**
P O # **BNSF Direct Bill Work Order No. TT0101-N10**

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOT Metals (As, Pb, Cd, Cr, Ba, Hg, So, Ag) (424W6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Other	Sample Specific Notes
MSB-SW1-100713	10/27/13	0945	G	S	1								1 day TAT
MSB-SW2-100713		0950	G	S	1								
MSB-SW3-100713		0955	G	S	1								
MSB-SW4-100713		1005	G	S	1								
MSB-SW5-100713		1110	G	S	1								
MSB-SW6-100713		1330	G	S	1								
MSB-SW7-100713		1325	G	S	1								
MSB-B51-100713		1005	G	S	1								
MSB-B52-100713		1015	G	S	1								
MSB-B53-100713		1100	G	S	1								
MSB-B54-100713		1335	G	S	1								

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown Return to Client Disposal by Lab Archive for _____ Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No

Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]* Received by: *[Signature]* Date/Time: *[Date/Time]*

Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]* Received in Laboratory by: *[Signature]* Date/Time: *[Date/Time]*

Form No. CA-C-W-002, Rev. 4.2, dated 04/02/2013

40745



TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

40745

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA OMSCA MTLA

TestAmerica Laboratories, Inc.

Client Contact: **Bruce Sheppard**
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Manager: Howard Young
Tel/Fax: 206-419-8629 / 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Carrier: **DFH13**
Date: **10/13**
COC No: **2** of **2** COCs

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: **5-8**
STO TAT
 2 weeks
 1 week
 2 days
 1 day

Sample Specific Notes:
Job / SDG No.:
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Sample ID: **1370 TAT 12**
1370 TAT 12
STO TAT 12

Sample Identification	Sample Date	Sample Time	Sample Type (c-Comp, g-grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	As, Ba, Cd, & Total Cr (EPA 6020)
MSB-DB1-100713	10/10	1515	g	W	3							
Y0-SW1-100713		1045		SS	1							
Y0-SW2-100713		1155										
Y0-SW3-100713		1205										
Y0-SW4-100713		1315										
Y0-B51-100713		1050										
Y0-B52-100713		1200										
Y0-B53-100713		1310										
Y0-B54-100713		1325										
Y0-B5104-100713		1325										
Y0-R01-100713		1330		W	1							

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for **1** Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No

Relinquished by: **[Signature]** Company: **TestAmerica** Date/Time: **10/13 15:50**

Relinquished by: **[Signature]** Company: **TestAmerica** Date/Time: **10/13 16:55**

Relinquished by: **[Signature]** Company: **TestAmerica** Date/Time: **10/13 16:55**

Cooler Temp. (C): Obsd. **5** Card: **1370 TAT 12** Therm ID No. **1370 TAT 12**

Cooler/TB Dig IR cor 5.8 unc 5.3
Cooler Dsc hollow @ Lab
Wet Packs Packing bubble
w/Co. FedEx P.O.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Temperature readings: 11:50 - 3.5°C, 12:05 - 3.7°C put away @ 12:06 *CL*

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
MSB-RB1-100713	580-40745-A-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-B-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-C-12	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100713	580-40745-A-22	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____





TestAmerica
5755 8th Street East

580-40745 Chain of Custody



Chain of Custody Record

Received MR - 10/23/13

40745

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5144

Project Manager: Howard Young

Site Contact: Howard Young

Date: 10/21/13

COG No. of 2 COGS

TestAmerica Laboratories, Inc.

Client Contact
Bruce Sheppard
BNSF Railway
2164 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project: 206-419-8029/253-952-3435
Analysis Turnaround Time:
 PALLET/DAYS
 WORKING DAYS
TAT Refriment (min below): 3 hrs
 2 weeks
 1 week
 2 days
 1 day

Lab Contact: Kris Allen
Filtered Sample (Y/N)
Perform MS/MSD (Y/N)
Semi-volatile Organics (8270)
PCBs (8082)
Volatile Organic Compounds (8260)
NINTH-DX W/SLUR
GEL CLEAN UP
DIESEL 40L DRUM

Carrier:
Job # SDG No.

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (cremily, genaly)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Semi-volatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NINTH-DX W/SLUR	GEL CLEAN UP	DIESEL 40L DRUM
MSB-SW1-1007A13	10/15	0915	L1	S	1		X				X		
MSB-SW2-1007A13		0930					X				X		
MSB-SW3-1007A13		0945					X				X		
MSB-SW4-1007A13		1005					X				X		
MSB-SW5-1007A13		1110					X				X		
MSB-SW6-1007A13		1330					X				X		
MSB-SW7-1007A13		1325					X				X		
MSB-B51-1007A13		1005					X				X		
MSB-B52-1007A13		1015					X				X		
MSB-B53-1007A13		1100					X				X		
MSB-B54-1007A13		1335					X				X		

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Non-Hazard Flammable Shift Intact Presorb Unknown Return to Client Disposal by Lab Archive for: Months

Relinquished by: *[Signature]* Custody Seal No. *[Blank]* Coder Temp. (C): Obs'd: *[Blank]* Therm ID No. *[Blank]*

Relinquished by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]* Receiver by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]*

Relinquished by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]* Receiver by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]*

Chain of Custody Record

40713

Regulatory Program: DW HOURS IRCA OMTCA ATCA

TestAmerica Laboratories, Inc.
COC No: 2 of 2 COCs

Client Contact: Project Manager: Howard Young
Tel/Fax: 206-419-8629/253-922-3435
Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS

Site Contact: Howard Young
Carrier: **10E113**

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P.O.#: BNSF Direct Bill Work Order No. TT0101-1N10

Project Address: 2161 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P.O.#: BNSF Direct Bill Work Order No. TT0101-1N10

Analysis: TAT in different from below WORKING DAYS
 2 weeks 5-7 DAY TAT
 1 week 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (e-Cont, s-Cont)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Carrier	Sample Specific Notes
MSB-1251-100713	10/16	1515	ts	W	3								
YO-SW1-100713		1045		SS	1								10/16 TAT 12
YO-SW2-100713		1155											10/16 TAT 13
YO-SW3-100713		1205											10/16 TAT 14
YO-SW4-100713		1315											10/16 TAT 15
YO-B51-100713		1050											10/16 TAT 16
YO-B52-100713		1200											10/16 TAT 17
YO-B53-100713		1310											10/16 TAT 18
YO-B54-100713		1325											10/16 TAT 19
YO-B5104-100713		1325											10/16 TAT 20
YO-R01-100713		1330											10/16 TAT 21

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please list any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-hazard Flammable Skin Irritant Poison II Unknown

Mediums: Chloro Disposed by Lab Retained for _____ Months

Specific analysis lists on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seal Intact: Yes No

Relinquished by: *[Signature]* Company: *Keeney Soils Construction* Date/Time: *10/16/13 15:50*

Relinquished by: *[Signature]* Company: *MSB* Date/Time: *10/16/13*

Relinquished by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]*

Received by: *[Signature]* Date/Time: *[Blank]*

Received in Laboratory by: *[Signature]* Date/Time: *[Blank]*

Company: *TestAmerica, Inc.* Date/Time: *10/16/13 15:50*

Company: *[Blank]* Date/Time: *[Blank]*

Company: *[Blank]* Date/Time: *[Blank]*

**Presley, Kim**

From: Howard Young [HowardYoung@KennedyJenks.com]
Sent: Tuesday, October 08, 2013 7:52 AM
To: Berry, Vanessa; Presley, Kim
Cc: Allen, Kristine
Subject: FW: BNSF Parkwater revised COC for samples collected on 10/7/2013
Attachments: COC_100813.PDF

Good Morning,
Kris is out today so can one of you address my email below and let me know it has been done.

Thank you,

Howard S. Young, LG
Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

From: Howard Young
Sent: Tuesday, October 08, 2013 7:44 AM
To: Kristine Allen (Kris.Allen@testamericainc.com)
Cc: Chris LaRose; Matt Wilson
Subject: BNSF Parkwater revised COC for samples collected on 10/7/2013

Kris,
Here is a revised COC for the samples that we collected on 10/7/2013 and you will receive this morning.

- Removed lead from the COC list
- No need to run the NWTPH-dx analysis in Nashville. Just run in Tacoma on 5 day TAT.

Thank you,

Howard S. Young, LG
Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40745-1

Login Number: 40745

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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?	False	Not filled on CoC
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40745-2
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young



Authorized for release by:
10/14/2013 5:37:49 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Job ID: 580-40745-2

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/8/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146944, for the following sample(s) from silica gel cleanup batch 146915: MSB-SW3-100713 (580-40745-3), MSB-SW7-100713 (580-40745-7), the results in the #2 Diesel Fuel Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of a mineral/transformer oil range product and motor oil. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146944, for the following sample(s) from silica gel cleanup batch 146915: MSB-BS2-100713 (580-40745-9), MSB-SW6-100713 (580-40745-6), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, a hydraulic oil or similar product, and motor oil. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146944, for the following sample(s) from silica gel cleanup batch 146915: MSB-BS1-100713 (580-40745-8), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and a grouping of individual peak(s) that may be due to 8270/PAH analytes; analysis by 8270 GC/MS is recommended for peak identification. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146944, for the following sample(s) from silica gel cleanup batch 146915: MSB-BS3-100713 (580-40745-10), MSB-BS4-100713 (580-40745-11), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of a mineral/transformer oil range product and motor oil. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.2

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		29		mg/Kg	☼	10/09/13 09:16	10/10/13 10:47	1
Motor Oil (>C24-C36)	ND		57		mg/Kg	☼	10/09/13 09:16	10/10/13 10:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				10/09/13 09:16	10/10/13 10:47	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		28		mg/Kg	☆	10/09/13 09:16	10/10/13 11:05	1
Motor Oil (>C24-C36)	ND		56		mg/Kg	☆	10/09/13 09:16	10/10/13 11:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				10/09/13 09:16	10/10/13 11:05	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.3

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☼	10/09/13 09:16	10/10/13 11:23	1
Motor Oil (>C24-C36)	52	Y	52		mg/Kg	☼	10/09/13 09:16	10/10/13 11:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	81		50 - 150				10/09/13 09:16	10/10/13 11:23	1

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Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.6

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☆	10/09/13 09:16	10/10/13 11:59	1
Motor Oil (>C24-C36)	ND		52		mg/Kg	☆	10/09/13 09:16	10/10/13 11:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				10/09/13 09:16	10/10/13 11:59	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 97.6

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		24		mg/Kg	☆	10/09/13 09:16	10/10/13 12:16	1
Motor Oil (>C24-C36)	ND		47		mg/Kg	☆	10/09/13 09:16	10/10/13 12:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				10/09/13 09:16	10/10/13 12:16	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	2400	Y	27		mg/Kg	☼	10/09/13 09:16	10/10/13 12:34	1
Motor Oil (>C24-C36)	9500	Y	54		mg/Kg	☼	10/09/13 09:16	10/10/13 12:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	103		50 - 150				10/09/13 09:16	10/10/13 12:34	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.0

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		24		mg/Kg	☼	10/09/13 09:16	10/10/13 14:18	1
Motor Oil (>C24-C36)	75	Y	48		mg/Kg	☼	10/09/13 09:16	10/10/13 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	90		50 - 150				10/09/13 09:16	10/10/13 14:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.0

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	180	Y	27		mg/Kg	☼	10/09/13 09:16	10/10/13 14:35	1
Motor Oil (>C24-C36)	370	Y	54		mg/Kg	☼	10/09/13 09:16	10/10/13 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				10/09/13 09:16	10/10/13 14:35	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.8

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	3700	Y	27		mg/Kg	☒	10/09/13 09:16	10/10/13 14:53	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	108		50 - 150				10/09/13 09:16	10/10/13 14:53	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	23000	Y	530		mg/Kg	☒	10/09/13 09:16	10/10/13 16:23	10
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	121		50 - 150				10/09/13 09:16	10/10/13 16:23	10

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 93.2

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	81	Y	25		mg/Kg	☼	10/09/13 09:16	10/10/13 15:11	1
Motor Oil (>C24-C36)	1100	Y	51		mg/Kg	☼	10/09/13 09:16	10/10/13 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				10/09/13 09:16	10/10/13 15:11	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	49	Y	25		mg/Kg	☼	10/09/13 09:16	10/10/13 15:29	1
Motor Oil (>C24-C36)	410	Y	50		mg/Kg	☼	10/09/13 09:16	10/10/13 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				10/09/13 09:16	10/10/13 15:29	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146861/1-B

Matrix: Solid

Analysis Batch: 146944

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		10/09/13 09:16	10/10/13 09:54	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		10/09/13 09:16	10/10/13 09:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150	10/09/13 09:16	10/10/13 09:54	1

Lab Sample ID: LCS 580-146861/2-B

Matrix: Solid

Analysis Batch: 146944

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	500	507		mg/Kg		101	64 - 127
Motor Oil (>C24-C36)	500	501		mg/Kg		100	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	97		50 - 150

Lab Sample ID: LCSD 580-146861/3-B

Matrix: Solid

Analysis Batch: 146944

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 146861

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	500	504		mg/Kg		101	64 - 127	1	16
Motor Oil (>C24-C36)	500	514		mg/Kg		103	70 - 125	3	17

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	93		50 - 150

Lab Sample ID: 580-40745-3 DU

Matrix: Solid

Analysis Batch: 146944

Client Sample ID: MSB-SW3-100713

Prep Type: Total/NA

Prep Batch: 146861

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	ND		ND		mg/Kg	☼	21	35
Motor Oil (>C24-C36)	52	Y	62.0		mg/Kg	☼	18	35

Surrogate	DU %Recovery	DU Qualifier	Limits
<i>o</i> -Terphenyl	80		50 - 150

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 10:47	JL1	TAL SEA

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 11:05	JL1	TAL SEA

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 11:23	JL1	TAL SEA

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 11:59	JL1	TAL SEA

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 12:16	JL1	TAL SEA

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 12:34	JL1	TAL SEA

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 14:18	JL1	TAL SEA

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 14:35	JL1	TAL SEA

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 14:53	JL1	TAL SEA
Total/NA	Prep	3546	DL		146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C	DL		146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx	DL	10	146944	10/10/13 16:23	JL1	TAL SEA

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 15:11	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146861	10/09/13 09:16	WW1	TAL SEA
Total/NA	Cleanup	3630C			146915	10/09/13 16:06	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146944	10/10/13 15:29	JL1	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40745-1	MSB-SW1-100713	Solid	10/07/13 09:45	10/07/13 16:15
580-40745-2	MSB-SW2-100713	Solid	10/07/13 09:50	10/07/13 16:15
580-40745-3	MSB-SW3-100713	Solid	10/07/13 09:55	10/07/13 16:15
580-40745-4	MSB-SW4-100713	Solid	10/07/13 11:05	10/07/13 16:15
580-40745-5	MSB-SW5-100713	Solid	10/07/13 11:10	10/07/13 16:15
580-40745-6	MSB-SW6-100713	Solid	10/07/13 13:30	10/07/13 16:15
580-40745-7	MSB-SW7-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-8	MSB-BS1-100713	Solid	10/07/13 10:05	10/07/13 16:15
580-40745-9	MSB-BS2-100713	Solid	10/07/13 10:15	10/07/13 16:15
580-40745-10	MSB-BS3-100713	Solid	10/07/13 11:00	10/07/13 16:15
580-40745-11	MSB-BS4-100713	Solid	10/07/13 13:35	10/07/13 16:15



TestAmerica Seattle
5755 8th Street East

Chain of Custody Record



Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW WPPES RCRA OMSCA APCA

TestAmerica Laboratories, Inc.
THE LEADER IN ENVIRONMENTAL TESTING
40745

Client Contact: **Bruce Sheppard** BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451
Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 3 day
 2 weeks
 1 week
 2 days
 1 day

Site Contact: Howard Young
Lab Contact: Kris Allen
Carrier: **1017-113**
Date: **10/7/13**
GOC No.: **1** of **2** CDCs
Sampler: **1**
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOT Metals (As, Pb, Cd, Cr, Ba, Hg, So, Ag) (424W6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Other	Sample Specific Notes
MSB-SW1-100713	10/7/13	0945	7	S	1		X						1 day TAT
MSB-SW2-100713		0950					X						
MSB-SW3-100713		0955					X						
MSB-SW4-100713		1005					X						
MSB-SW5-100713		1110					X						
MSB-SW6-100713		1330					X						
MSB-SW7-100713		1325					X						
MSB-B51-100713		1005					X						
MSB-B52-100713		1015					X						
MSB-B53-100713		1100					X						
MSB-B54-100713		1335					X						

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for _____ Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No
Custody Seal No.:
Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]*
Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]*
Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]*
Cooler Temp. (°C): Obs'd: _____
Company: *[Company Name]* Date/Time: *[Date/Time]*
Company: *[Company Name]* Date/Time: *[Date/Time]*
Company: *[Company Name]* Date/Time: *[Date/Time]*
Therm ID No.: _____
Date/Time: *[Date/Time]*
Date/Time: *[Date/Time]*
Date/Time: *[Date/Time]*



TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

40745

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047
Regulatory Program: DW NPDES RCRA OMSCA MTLA
Client Contact: Bruce Sheppard
Project Manager: Howard Young
Tel/Fax: 206-419-8629 / 253-952-3435
Site Contact: Howard Young
Carrier: **107413**
COC No: **2** of **2** COCs

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10
Project Manager: Howard Young
Tel/Fax: 206-419-8629 / 253-952-3435
Site Contact: Howard Young
Carrier: **107413**
COC No: **2** of **2** COCs

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: **5** days
1 week
2 days
1 day

Sample Identification	Sample Date	Sample Time	Sample Type (c-Comp, g-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	As, Ba, Cd, & Total Cr (EPA 6020)	Sample Specific Notes
MSB-DB1-100713	10/10	1515	g	W	3								STD TAT 12
Y0-SW1-100713		1045		SS	1								STD TAT 12
Y0-SW2-100713		1155											14
Y0-SW3-100713		1205											15
Y0-SW4-100713		1315											16
Y0-B51-100713		1050											17
Y0-B52-100713		1200											16
Y0-B53-100713		1310											19
Y0-B54-100713		1325											20
Y0-B5104-100713		1325											21
Y0-R01-100713		1330		W									22

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for **1** Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.
Custody Seals Intact: Yes No
Custody Seal No.:
Relinquished by: **[Signature]** Company: **TestAmerica** Date/Time: **10/7/13 15:50** Received by: **[Signature]** Received in Laboratory by: **[Signature]** Cooler Temp. (°C): Obs'd: **[Blank]** Card: **[Blank]** Therm ID No.:
Relinquished by: **[Signature]** Company: **TestAmerica** Date/Time: **10/7/13 16:55** Received by: **[Signature]** Received in Laboratory by: **[Signature]** Cooler Temp. (°C): Obs'd: **[Blank]** Card: **[Blank]** Therm ID No.:
Relinquished by: **[Signature]** Company: **TestAmerica** Date/Time: **10/7/13 16:55** Received by: **[Signature]** Received in Laboratory by: **[Signature]** Cooler Temp. (°C): Obs'd: **[Blank]** Card: **[Blank]** Therm ID No.:

Cooler/TB Dig IR cor 5.8 unc 5.3
Cooler Dsc hollow @ Lab
Wet Packs Packing bubble
w/Co. FedEx P.O.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Temperature readings: 11:50 - 3.5°C, 12:05 - 3.7°C put away @ 12:06 *CL*

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
MSB-RB1-100713	580-40745-A-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-B-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-C-12	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100713	580-40745-A-22	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____





TestAmerica
5755 8th Street East



580-40745 Chain of Custody

Chain of Custody Record

Received by: *[Signature]*
10/16/13

40745

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5144

Project Manager: Howard Young
Tel/Fax: 206-419-8029/253-962-3436

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 10-17-13

COC No. of COCS

TestAmerica Laboratories, Inc.

Client Contact
Bruce Sheppard
BNSF Railway
2164 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time:
 PALLET/DAYS
 WORKING DAYS
TAT Refracted from Below: 3 hrs
 2 weeks
 1 week
 2 days
 1 day

Filtered Sample (Y/N)
Perform MS/MSD (Y/N)
Semi-volatile Organics (8270)
PCBs (8082)
Volatile Organic Compounds (8260)
NINTH-DX W/SLUR
GEL CLEAN UP
DIESEL 40L DRUM

Carrier:
Job # SDG No.

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job # SDG No.

Sample Identification	Sample Date	Sample Time	Sample Type (cremily, genaly)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Semi-volatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NINTH-DX W/SLUR	GEL CLEAN UP	DIESEL 40L DRUM	Sample Specific Notes
MSB-SW1-1007A13	10/15	0915	L1	S	1		X				X			1-2-1 TAT 1
MSB-SW2-1007A13		0930					X				X			2
MSB-SW3-1007A13		0945					X				X			3
MSB-SW4-1007A13		1005					X				X			7
MSB-SW5-1007A13		1110					X				X			5
MSB-SW6-1007A13		1330					X				X			6
MSB-SW7-1007A13		1325					X				X			7
MSB-B51-1007A13		1005					X				X			8
MSB-B52-1007A13		1015					X				X			9
MSB-B53-1007A13		1100					X				X			10
MSB-B54-1007A13		1335					X				X			11

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.
 Non-Hazard Flammable Shift Intact Presorb Unknown Return to Client Disposal by Lab Archive for Months

Relinquished by: *[Signature]* Custody Seal No. Yes No
Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/15/13 15:50*
Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/16/13*
Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/16/13*

Chain of Custody Record

Regulatory Program: DW Inflow Inflow MTCA

TestAmerica Laboratories, Inc.

TestAmerica
1701 1st Avenue East
Tacoma, WA 98404

40713

Client Contact BNSF Railroad 2161 Occidental Avenue South, Suite 1A Seattle, Washington 98134-1451		Project Manager: Howard Young Tel/Fax: 206-419-8629/253-982-3435		Site Contact: Howard Young		Date: 10/13		COC No: 2 of 2 COCs							
Project Name: Parkwater RA Site: Parkwater, Spokane, WA P.O.#: BNSF Direct Bill Work Order No. TT0101-1N10		Analysis Turnaround Time <input type="checkbox"/> Calendar Days <input checked="" type="checkbox"/> Working Days TAT in different from below <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 5-7 days <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Lab Contact: Kris Allen		Carrier:		Sample Specific Notes: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No:							
Sample Identification		Sample Date	Sample Time	Sample Type (e-Cont, s-Cont)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	As, Pb, Cd, & Total Cr (EPA 8020)	Carrier	
MSB-1281-100713		10/16	1515	ts	SS	3									
Y0-SW1-100713			1045			1									
Y0-SW2-100713			1155			1									
Y0-SW3-100713			1205			1									
Y0-SW4-100713			1315			1									
Y0-B51-100713			1050			1									
Y0-B52-100713			1200			1									
Y0-B53-100713			1310			1									
Y0-B54-100713			1325			1									
Y0-B5104-100713			1325			1									
Y0-R01-100713			1330			1									
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please list any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.															
Specific analysis lists on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.															
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)															
Non-hazard <input type="checkbox"/> Hazardous <input type="checkbox"/>															
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No															
Relinquished by: <i>[Signature]</i>		Custody Seal No.		Date/Time: 10/13/13 15:50		Received by: <i>[Signature]</i>		Cooler Temp (C): Obs'd		Company: TestAmerica		Date/Time: 10/13/13 15:50		Company: TestAmerica	
Relinquished by: <i>[Signature]</i>		Custody Seal No.		Date/Time: 10/13/13 15:50		Received by: <i>[Signature]</i>		Cooler Temp (C): Obs'd		Company: TestAmerica		Date/Time: 10/13/13 15:50		Company: TestAmerica	
Relinquished by: <i>[Signature]</i>		Custody Seal No.		Date/Time: 10/13/13 15:50		Received in Laboratory by: <i>[Signature]</i>		Cooler Temp (C): Obs'd		Company: TestAmerica		Date/Time: 10/13/13 15:50		Company: TestAmerica	

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11**Presley, Kim**

From: Howard Young [HowardYoung@KennedyJenks.com]
Sent: Tuesday, October 08, 2013 7:52 AM
To: Berry, Vanessa; Presley, Kim
Cc: Allen, Kristine
Subject: FW: BNSF Parkwater revised COC for samples collected on 10/7/2013
Attachments: COC_100813.PDF

Good Morning,
Kris is out today so can one of you address my email below and let me know it has been done.

Thank you,

Howard S. Young, LG
Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

From: Howard Young
Sent: Tuesday, October 08, 2013 7:44 AM
To: Kristine Allen (Kris.Allen@testamericainc.com)
Cc: Chris LaRose; Matt Wilson
Subject: BNSF Parkwater revised COC for samples collected on 10/7/2013

Kris,
Here is a revised COC for the samples that we collected on 10/7/2013 and you will receive this morning.

- Removed lead from the COC list
- No need to run the NWTPH-dx analysis in Nashville. Just run in Tacoma on 5 day TAT.

Thank you,

Howard S. Young, LG
Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40745-2

Login Number: 40745

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	not present
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?	False	Not filled on CoC
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40745-3
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young



Authorized for release by:
10/9/2013 5:39:32 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Job ID: 580-40745-3

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/8/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

Metals

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.39		mg/Kg	✱	10/08/13 15:56	10/09/13 11:11	10
Barium	130		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:11	10
Cadmium	ND		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:11	10
Chromium	18		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:11	10

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		0.41		mg/Kg	✱	10/08/13 15:56	10/09/13 11:15	10
Barium	140		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:15	10
Cadmium	ND		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:15	10
Chromium	31		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:15	10



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.0		0.41		mg/Kg	✱	10/08/13 15:56	10/09/13 12:00	10
Barium	65		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 12:00	10
Cadmium	ND		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 12:00	10
Chromium	13		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 12:00	10

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.5		0.44		mg/Kg	✱	10/08/13 15:56	10/09/13 11:27	10
Barium	87		0.18		mg/Kg	✱	10/08/13 15:56	10/09/13 11:27	10
Cadmium	ND		0.18		mg/Kg	✱	10/08/13 15:56	10/09/13 11:27	10
Chromium	17		0.18		mg/Kg	✱	10/08/13 15:56	10/09/13 11:27	10

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 97.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5		0.38		mg/Kg	✱	10/08/13 15:56	10/09/13 11:31	10
Barium	64		0.15		mg/Kg	✱	10/08/13 15:56	10/09/13 11:31	10
Cadmium	ND		0.15		mg/Kg	✱	10/08/13 15:56	10/09/13 11:31	10
Chromium	9.6		0.15		mg/Kg	✱	10/08/13 15:56	10/09/13 11:31	10



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.0		0.50		mg/Kg	☼	10/08/13 15:56	10/09/13 11:35	10
Barium	110		0.20		mg/Kg	☼	10/08/13 15:56	10/09/13 11:35	10
Cadmium	ND		0.20		mg/Kg	☼	10/08/13 15:56	10/09/13 11:35	10
Chromium	16		0.20		mg/Kg	☼	10/08/13 15:56	10/09/13 11:35	10



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.9		0.40		mg/Kg	✱	10/08/13 15:56	10/09/13 11:39	10
Barium	48		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:39	10
Cadmium	ND		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:39	10
Chromium	9.9		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:39	10

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.6		0.36		mg/Kg	✱	10/08/13 15:56	10/09/13 11:43	10
Barium	120		0.15		mg/Kg	✱	10/08/13 15:56	10/09/13 11:43	10
Cadmium	ND		0.15		mg/Kg	✱	10/08/13 15:56	10/09/13 11:43	10
Chromium	15		0.15		mg/Kg	✱	10/08/13 15:56	10/09/13 11:43	10

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.2		0.43		mg/Kg	✱	10/08/13 15:56	10/09/13 11:47	10
Barium	110		0.17		mg/Kg	✱	10/08/13 15:56	10/09/13 11:47	10
Cadmium	ND		0.17		mg/Kg	✱	10/08/13 15:56	10/09/13 11:47	10
Chromium	17		0.17		mg/Kg	✱	10/08/13 15:56	10/09/13 11:47	10



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 93.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		0.33		mg/Kg	✱	10/08/13 15:56	10/09/13 11:51	10
Barium	27		0.13		mg/Kg	✱	10/08/13 15:56	10/09/13 11:51	10
Cadmium	ND		0.13		mg/Kg	✱	10/08/13 15:56	10/09/13 11:51	10
Chromium	5.2		0.13		mg/Kg	✱	10/08/13 15:56	10/09/13 11:51	10

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.3		0.41		mg/Kg	✱	10/08/13 15:56	10/09/13 11:56	10
Barium	50		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:56	10
Cadmium	ND		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:56	10
Chromium	7.6		0.16		mg/Kg	✱	10/08/13 15:56	10/09/13 11:56	10

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146820/18-A

Matrix: Solid

Analysis Batch: 146900

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/08/13 15:56	10/09/13 10:13	10
Barium	ND		0.20		mg/Kg		10/08/13 15:56	10/09/13 10:13	10
Cadmium	ND		0.20		mg/Kg		10/08/13 15:56	10/09/13 10:13	10
Chromium	ND		0.20		mg/Kg		10/08/13 15:56	10/09/13 10:13	10

Lab Sample ID: LCS 580-146820/19-A

Matrix: Solid

Analysis Batch: 146900

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	202		mg/Kg		101	80 - 120
Barium	200	200		mg/Kg		100	80 - 120
Cadmium	5.00	4.69		mg/Kg		94	80 - 120
Chromium	20.0	20.6		mg/Kg		103	80 - 120

Lab Sample ID: LCSD 580-146820/20-A

Matrix: Solid

Analysis Batch: 146900

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 146820

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	203		mg/Kg		101	80 - 120	0	20
Barium	200	201		mg/Kg		101	80 - 120	0	20
Cadmium	5.00	4.57		mg/Kg		91	80 - 120	3	20
Chromium	20.0	20.4		mg/Kg		102	80 - 120	1	20

Lab Sample ID: LCSSRM 580-146820/21-A

Matrix: Solid

Analysis Batch: 146900

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146820

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	237	252		mg/Kg		106.3	71.3 - 129. 1
Barium	252	262		mg/Kg		104.0	73.8 - 126. 2
Cadmium	191	196		mg/Kg		102.7	73.3 - 126. 7
Chromium	128	135		mg/Kg		105.2	65.5 - 129. 7

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:11	FCW	TAL SEA

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:15	FCW	TAL SEA

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 12:00	FCW	TAL SEA

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:27	FCW	TAL SEA

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:31	FCW	TAL SEA

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:35	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:39	FCW	TAL SEA

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:43	FCW	TAL SEA

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:47	FCW	TAL SEA

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:51	FCW	TAL SEA

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146820	10/08/13 15:56	PAB	TAL SEA
Total/NA	Analysis	6020		10	146900	10/09/13 11:56	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40745-1	MSB-SW1-100713	Solid	10/07/13 09:45	10/07/13 16:15
580-40745-2	MSB-SW2-100713	Solid	10/07/13 09:50	10/07/13 16:15
580-40745-3	MSB-SW3-100713	Solid	10/07/13 09:55	10/07/13 16:15
580-40745-4	MSB-SW4-100713	Solid	10/07/13 11:05	10/07/13 16:15
580-40745-5	MSB-SW5-100713	Solid	10/07/13 11:10	10/07/13 16:15
580-40745-6	MSB-SW6-100713	Solid	10/07/13 13:30	10/07/13 16:15
580-40745-7	MSB-SW7-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-8	MSB-BS1-100713	Solid	10/07/13 10:05	10/07/13 16:15
580-40745-9	MSB-BS2-100713	Solid	10/07/13 10:15	10/07/13 16:15
580-40745-10	MSB-BS3-100713	Solid	10/07/13 11:00	10/07/13 16:15
580-40745-11	MSB-BS4-100713	Solid	10/07/13 13:35	10/07/13 16:15

TestAmerica Seattle
5755 8th Street East

Chain of Custody Record



Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW WPPES RCRA OMSCA APCA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact: **Bruce Sheppard** Project Manager: **Howard Young** Site Contact: **Howard Young** Date: **10/7/13** Carrier: **10/7/13** COC No. **1** of **2** CDCs

Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
TAT if different from Below: 3 day
 2 weeks 1 week 2 days 1 day

Project Name: **Parkwater RA**
Site: **Parkwater, Spokane, WA**
P O # **BNSF Direct Bill Work Order No. TT0101-N10**

Sample Specific Notes:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOT Metals (As, Pb, Cd, Cr, Ba, Hg, So, Ag) (424W6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Other
MSB-SW1-100713	10/7/13	0945	G	S	1		X					1 day TAT
MSB-SW2-100713		0950	G	S	1		X					
MSB-SW3-100713		0955	G	S	1		X					
MSB-SW4-100713		1005	G	S	1		X					
MSB-SW5-100713		1110	G	S	1		X					
MSB-SW6-100713		1330	G	S	1		X					
MSB-SW7-100713		1325	G	S	1		X					
MSB-B51-100713		1005	G	S	1		X					
MSB-B52-100713		1015	G	S	1		X					
MSB-B53-100713		1100	G	S	1		X					
MSB-B54-100713		1335	G	S	1		X					

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No

Relinquished by: **[Signature]** Company: **Kennedy, Burke & Associates** Date/Time: **10/7/13 15:50** Received by: **[Signature]** Date/Time: **10/7/13 16:15**

Relinquished by: **[Signature]** Company: **TestAmerica Inc** Date/Time: **10/7/13 16:15** Received in Laboratory by: **[Signature]**

Cooler Temp. (°C): Obs'd: _____ Cont'd: _____ Therm ID No.: _____



TestAmerica Seattle

5755 8th Street East
Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

40745



TestAmerica Laboratories, Inc.

10/9/2013

Regulatory Program: DW NPDES RCRA OMSCA MTLA

Project Manager: Howard Young
Tel/Fax: 206-419-8629 / 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 10/11/13

COC No: 2 of 2 COCs

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 5-8 STD TAT
 2 weeks
 1 week
 2 days
 1 day

Carrier: 10/11/13
Filtered Sample (Y/N)
Perform MS/MSD (Y/N)
TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)
Semivolatile Organics (8270)
PCBs (8082)
Volatile Organic Compounds (8260)
NWTPH-DX W/SILVA
CEL CLEAN UP
DESEL OIL TANK
As, Ba, Cd, & Total Cr (EPA 6020)

Sampler: 2
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (c-comp, g-grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Carrier	COC No.
<u>MSB-DB1-100713</u>	<u>10/10</u>	<u>1515</u>	<u>g</u>	<u>W</u>	<u>3</u>								
<u>Y0-SW1-100713</u>		<u>1045</u>		<u>SS</u>	<u>1</u>								
<u>Y0-SW2-100713</u>		<u>1155</u>											
<u>Y0-SW3-100713</u>		<u>1205</u>											
<u>Y0-SW4-100713</u>		<u>1315</u>											
<u>Y0-B51-100713</u>		<u>1050</u>											
<u>Y0-B52-100713</u>		<u>1200</u>											
<u>Y0-B53-100713</u>		<u>1310</u>											
<u>Y0-B54-100713</u>		<u>1325</u>											
<u>Y0-B5104-100713</u>		<u>1325</u>											
<u>Y0-R01-100713</u>		<u>1330</u>		<u>W</u>	<u>1</u>								

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No

Relinquished by: [Signature] Company: Kennedy Tank Services Date/Time: 11/7/13 15:50 Received by: [Signature] Received in Laboratory by: [Signature] Cooler Temp. (°C): Obs'd: Card: Therm ID No.:

Relinquished by: [Signature] Company: TestAmerica-Seattle Date/Time: 11/7/13 14:55 Received in Laboratory by: [Signature] Company: TestAmerica-Seattle Date/Time: 10/11/13 16:55

Cooler/TB Dig IR cor 5.8 unc 5.3
Cooler Dsc hollow @ Lab
Wet Packs Packing bubble
w/co. FedEx P.O.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Temperature readings: 11:50 - 3.5°C, 12:05 - 3.7°C put away @ 12:06 *CL*

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
MSB-RB1-100713	580-40745-A-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-B-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-C-12	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100713	580-40745-A-22	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____





TestAmerica
5755 8th Street East



580-40745 Chain of Custody

Chain of Custody Record

Received by: *[Signature]*
10/9/13

40745

TestAmerica
Laboratories, Inc.

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5144

Project Manager: Howard Young

Lab Contact: Howard Young

Date: 10/7/13

COC No. of COCS

Client Contact
Bruce Sheppard
BNSF Railway
2164 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project: 206-419-8029/253-952-3435
Analysis Turnaround Time:
 PALLET/DAYS
 WORKING DAYS
TAT Refriment (min below): 3 hrs
2 weeks
1 week
2 days
1 day

Site Contact: Howard Young
Lab Contact: Kris Allen
Filtered Sample (Y/N)
Perform MS/MSD (Y/N)
Semi-volatile Organics (8270)
PCBs (8082)
Volatile Organic Compounds (8260)
NINTH-DX W/SLUR
GEL CLEAN UP
DIESEL 40L DRUM

Carrier:
Job # SDG No.

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (cremily, genaly)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Semi-volatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NINTH-DX W/SLUR	GEL CLEAN UP	DIESEL 40L DRUM
MSB-SW1-1007113	10/15	0915	L1	S	1		X						
MSB-SW2-1007113		0950					X						
MSB-SW3-1007113		0955					X						
MSB-SW4-1007113		1005					X						
MSB-SW5-1007113		1110					X						
MSB-SW6-1007113		1330					X						
MSB-SW7-1007113		1325					X						
MSB-B51-1007113		1005					X						
MSB-B52-1007113		1015					X						
MSB-B53-1007113		1100					X						
MSB-B54-1007113		1335					X						

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Non-Hazard Flammable Shift Intact Presorb Unknown Return to Client Disposal by Lab Archive for: Months

Custody Seal Intact: Yes No

Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/15/13 15:50*

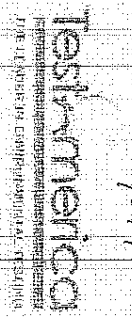
Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/15/13*

Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/15/13*

Chain of Custody Record

Regulatory Program: DW HOURS JACO METCA ATCA

TestAmerica Laboratories, Inc.



Client Contact BNSF Railroad 2161 Occidental Avenue South, Suite 1A Seattle, Washington 98134-1451		Project Manager: Howard Young Tel/Fax: 206-419-8629/253-922-3435		Site Contact: Howard Young		Date: 10/13		COC No: 2 of 2 COCs						
Project Name: Parkwater RA Site: Parkwater, Spokane, WA P.O.#: BNSF Direct Bill Work Order No. TT0101-1N10		Analysis Turnaround Time <input type="checkbox"/> Calendar Days <input checked="" type="checkbox"/> Working Days TAT in alternate font below <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 5-7 days <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Lab Contact: Kris Allen		Carrier:		Sample: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No:						
Sample Identification		Sample Date	Sample Time	Sample Type (e-Cont, s-cont)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	As, Pb, Cd, & Total Cr (EPA 8020)	Sample Specific Notes
MSB-1281-100713		10/16	1515	ts	SS	3								1281 TAT 12
Y0-SW1-100713			1045			1								1281 TAT 13
Y0-SW2-100713			1155			1								14
Y0-SW3-100713			1205			1								15
Y0-SW4-100713			1315			1								16
Y0-B51-100713			1050			1								17
Y0-B52-100713			1200			1								18
Y0-B53-100713			1310			1								19
Y0-B54-100713			1325			1								20
Y0-B5104-100713			1325			1								21
Y0-R01-100713			1330			1								22

40745

**Presley, Kim**

From: Howard Young [HowardYoung@KennedyJenks.com]
Sent: Tuesday, October 08, 2013 7:52 AM
To: Berry, Vanessa; Presley, Kim
Cc: Allen, Kristine
Subject: FW: BNSF Parkwater revised COC for samples collected on 10/7/2013
Attachments: COC_100813.PDF

Good Morning,

Kris is out today so can one of you address my email below and let me know it has been done.

Thank you,

Howard S. Young, LG

Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

From: Howard Young
Sent: Tuesday, October 08, 2013 7:44 AM
To: Kristine Allen (Kris.Allen@testamericainc.com)
Cc: Chris LaRose; Matt Wilson
Subject: BNSF Parkwater revised COC for samples collected on 10/7/2013

Kris,

Here is a revised COC for the samples that we collected on 10/7/2013 and you will receive this morning.

- Removed lead from the COC list
- No need to run the NWTPH-dx analysis in Nashville. Just run in Tacoma on 5 day TAT.

Thank you,

Howard S. Young, LG

Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40745-3

Login Number: 40745

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	not present
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?	False	Not filled on CoC
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40770-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/23/2013 5:11:45 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

1

2

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Job ID: 580-40770-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/9/2013 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 147753 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.



Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Qualifiers

Metals

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: MSB-RB1-100813

Lab Sample ID: 580-40770-5

Date Collected: 10/08/13 12:15

Matrix: Water

Date Received: 10/09/13 09:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/10/13 13:21	10/10/13 18:46	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/10/13 13:21	10/10/13 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				10/10/13 13:21	10/10/13 18:46	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 21:43	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 21:43	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 21:43	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 21:43	5



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW5-100813

Lab Sample ID: 580-40770-6

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	31		0.48		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10
Barium	150		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10
Cadmium	0.70		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10
Chromium	23		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/11/13 13:21	1
Percent Moisture	13		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW6-100813

Lab Sample ID: 580-40770-7

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.4		0.43		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10
Barium	84		0.17		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10
Cadmium	ND		0.17		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10
Chromium	6.5		0.17		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/11/13 13:21	1
Percent Moisture	9.6		0.10		%			10/11/13 13:21	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW7-100813

Lab Sample ID: 580-40770-8

Date Collected: 10/08/13 11:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 89.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.50		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10
Barium	100		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10
Cadmium	0.61		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10
Chromium	14		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/11/13 13:21	1
Percent Moisture	10		0.10		%			10/11/13 13:21	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW8-100813

Lab Sample ID: 580-40770-9

Date Collected: 10/08/13 12:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 81.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		0.51		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10
Barium	460		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10
Cadmium	0.53		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10
Chromium	19		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10		%			10/11/13 13:21	1
Percent Moisture	19		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW9-100813

Lab Sample ID: 580-40770-10

Date Collected: 10/08/13 12:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.47		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10
Barium	100		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10
Cadmium	0.59		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10
Chromium	14		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/11/13 13:21	1
Percent Moisture	11		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW105-100813

Lab Sample ID: 580-40770-11

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 87.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.51		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10
Barium	230		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10
Cadmium	0.38		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10
Chromium	19		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/11/13 13:21	1
Percent Moisture	12		0.10		%			10/11/13 13:21	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-BS5-100813

Lab Sample ID: 580-40770-12

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		0.37		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10
Barium	120		0.15		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10
Cadmium	ND		0.15		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10
Chromium	22		0.15		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/11/13 13:21	1
Percent Moisture	13		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-BS6-100813

Lab Sample ID: 580-40770-13

Date Collected: 10/08/13 12:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 84.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.43		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10
Barium	210		0.17		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10
Cadmium	0.19		0.17		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10
Chromium	24		0.17		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			10/11/13 13:21	1
Percent Moisture	16		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-RB1-100813

Lab Sample ID: 580-40770-14

Date Collected: 10/08/13 10:50

Matrix: Water

Date Received: 10/09/13 09:40

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:31	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:31	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:31	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:31	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146989/1-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146989

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/10/13 13:21	10/10/13 17:35	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/10/13 13:21	10/10/13 17:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150	10/10/13 13:21	10/10/13 17:35	1

Lab Sample ID: LCS 580-146989/2-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.46		mg/L		87	70 - 130
Motor Oil (>C24-C36)	4.00	4.10		mg/L		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	84		50 - 150

Lab Sample ID: LCSD 580-146989/3-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.39		mg/L		85	70 - 130	2	30
Motor Oil (>C24-C36)	4.00	4.07		mg/L		102	70 - 130	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	78		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147753/12-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/22/13 11:58	10/22/13 14:09	10
Barium	ND		0.20		mg/Kg		10/22/13 11:58	10/22/13 14:09	10
Cadmium	ND		0.20		mg/Kg		10/22/13 11:58	10/22/13 14:09	10
Chromium	ND		0.20		mg/Kg		10/22/13 11:58	10/22/13 14:09	10

Lab Sample ID: LCS 580-147753/13-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	199		mg/Kg		99	80 - 120
Barium	200	192		mg/Kg		96	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-147753/13-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.00	4.64		mg/Kg		93	80 - 120
Chromium	20.0	19.3		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-147753/14-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	199		mg/Kg		100	80 - 120	0	20
Barium	200	192		mg/Kg		96	80 - 120	0	20
Cadmium	5.00	4.55		mg/Kg		91	80 - 120	2	20
Chromium	20.0	19.1		mg/Kg		96	80 - 120	1	20

Lab Sample ID: 580-40770-6 MS
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	31		211	270		mg/Kg	☼	113	80 - 120
Barium	150		211	425	F	mg/Kg	☼	129	80 - 120
Cadmium	0.70		5.28	5.99		mg/Kg	☼	100	80 - 120
Chromium	23		21.1	49.1	F	mg/Kg	☼	122	80 - 120

Lab Sample ID: 580-40770-6 MSD
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	31		206	253		mg/Kg	☼	108	80 - 120	7	20
Barium	150		206	367		mg/Kg	☼	104	80 - 120	15	20
Cadmium	0.70		5.14	5.72		mg/Kg	☼	98	80 - 120	5	20
Chromium	23		20.6	39.4	F	mg/Kg	☼	77	80 - 120	22	20

Lab Sample ID: 580-40770-6 DU
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	31		26.9		mg/Kg	☼	13	20
Barium	150		135		mg/Kg	☼	13	20
Cadmium	0.70		0.621		mg/Kg	☼	12	20
Chromium	23		20.9		mg/Kg	☼	12	20

Lab Sample ID: MB 580-147239/19-A
Matrix: Water
Analysis Batch: 147327

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 147239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 18:17	5

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-147239/19-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 18:17	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5

Lab Sample ID: LCS 580-147239/20-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Arsenic	4.00	4.04		mg/L		101	80 - 120
Barium	4.00	3.96		mg/L		99	80 - 120
Cadmium	0.100	0.0951		mg/L		95	80 - 120
Chromium	0.400	0.389		mg/L		97	80 - 120

Lab Sample ID: LCSD 580-147239/21-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Arsenic	4.00	4.08		mg/L		102	80 - 120	1	20
Barium	4.00	3.99		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.0952		mg/L		95	80 - 120	0	20
Chromium	0.400	0.389		mg/L		97	80 - 120	0	20

Lab Sample ID: 580-40770-5 MS

Matrix: Water

Analysis Batch: 147327

Client Sample ID: MSB-RB1-100813

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Arsenic	ND		4.00	4.03		mg/L		101	80 - 120
Barium	ND		4.00	4.10		mg/L		103	80 - 120
Cadmium	ND		0.100	0.0935		mg/L		94	80 - 120
Chromium	ND		0.400	0.382		mg/L		95	80 - 120

Lab Sample ID: 580-40770-5 MSD

Matrix: Water

Analysis Batch: 147327

Client Sample ID: MSB-RB1-100813

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
Arsenic	ND		4.00	4.13		mg/L		103	80 - 120	2	20
Barium	ND		4.00	4.10		mg/L		102	80 - 120	0	20
Cadmium	ND		0.100	0.0938		mg/L		94	80 - 120	0	20
Chromium	ND		0.400	0.388		mg/L		97	80 - 120	2	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40770-5 DU
Matrix: Water
Analysis Batch: 147327

Client Sample ID: MSB-RB1-100813
Prep Type: Total Recoverable
Prep Batch: 147239

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Arsenic	ND		ND		mg/L		NC	20
Barium	ND		ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40770-6 DU
Matrix: Solid
Analysis Batch: 147074

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Percent Solids	87		88		%		1	20
Percent Moisture	13		12		%		10	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: MSB-RB1-100813

Lab Sample ID: 580-40770-5

Date Collected: 10/08/13 12:15

Matrix: Water

Date Received: 10/09/13 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146989	10/10/13 13:21	RBL	TAL SEA
Total/NA	Cleanup	3630C			147004	10/10/13 16:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146943	10/10/13 18:46	JL1	TAL SEA
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 21:43	FCW	TAL SEA

Client Sample ID: YO-SW5-100813

Lab Sample ID: 580-40770-6

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 14:26	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW6-100813

Lab Sample ID: 580-40770-7

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 14:56	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW7-100813

Lab Sample ID: 580-40770-8

Date Collected: 10/08/13 11:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:00	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW8-100813

Lab Sample ID: 580-40770-9

Date Collected: 10/08/13 12:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW9-100813

Lab Sample ID: 580-40770-10

Date Collected: 10/08/13 12:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:09	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW105-100813

Lab Sample ID: 580-40770-11

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:13	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-BS5-100813

Lab Sample ID: 580-40770-12

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-BS6-100813

Lab Sample ID: 580-40770-13

Date Collected: 10/08/13 12:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:21	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-RB1-100813

Lab Sample ID: 580-40770-14

Date Collected: 10/08/13 10:50

Matrix: Water

Date Received: 10/09/13 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:31	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40770-5	MSB-RB1-100813	Water	10/08/13 12:15	10/09/13 09:40
580-40770-6	YO-SW5-100813	Solid	10/08/13 10:45	10/09/13 09:40
580-40770-7	YO-SW6-100813	Solid	10/08/13 11:20	10/09/13 09:40
580-40770-8	YO-SW7-100813	Solid	10/08/13 11:45	10/09/13 09:40
580-40770-9	YO-SW8-100813	Solid	10/08/13 12:25	10/09/13 09:40
580-40770-10	YO-SW9-100813	Solid	10/08/13 12:35	10/09/13 09:40
580-40770-11	YO-SW105-100813	Solid	10/08/13 10:45	10/09/13 09:40
580-40770-12	YO-BS5-100813	Solid	10/08/13 11:35	10/09/13 09:40
580-40770-13	YO-BS6-100813	Solid	10/08/13 12:30	10/09/13 09:40
580-40770-14	YO-RB1-100813	Water	10/08/13 10:50	10/09/13 09:40



TestAmerica Seattle
5755 8th Street East

580-40770 Chain of Custody



Chain of Custody Record

40 770

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA

OMTCA MTLA

TestAmerica Laboratories, Inc.

Client Contact

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Site Contact: Howard Young

Date: 10/8/13

COC No: 1 of 2 COCs

Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS

Lab Contact: Kris Allen

Carrier:

Sampler: 1

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-4N10

TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

For Lab Use Only:
Walk-in Client
Lab Sampling:

Job / SDG No.:

Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOT Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (14944/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NWTPH-DX W/SLKA	LEEL CLEAN UP	DIESEL & OIL TANKS
MSB-5W8-100813	10/8/13	1120	L	S	1	X	X					X		
MSB-5W9-100813		1125		S	1	X	X					X		
MSB-5W10-100813		1130		S	1	X	X					X		
MSB-B55-100813		1135		S	1	X	X					X		
MSB-B31-100813		1215		S	3	X	X					X		
Y0-5W5-100813		1045		S	1	X	X							
Y0-5W6-100813		1120		S	1	X	X							
Y0-5W7-100813		1145		S	1	X	X							
Y0-5W8-100813		1225		S	1	X	X							
Y0-5W9-100813		1235		S	1	X	X							
Y0-5W105-100813		1045		S	1	X	X							

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposed by Lab Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No

Custody Seal No.:

Cooler Temp. (°C): Obs'd: _____

Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: <i>[Signature]</i>	Company: Kennedy Tank Containers	Date/Time: 10/8/13 15:30	Received by: <i>[Signature]</i>	Company: TestAmerica	Date/Time: 10/8/13 14:00
Relinquished by: <i>[Signature]</i>	Company: TestAmerica	Date/Time: 10/9/13 9:40	Received by: <i>[Signature]</i>	Company: TestAmerica	Date/Time: 10/9/13 9:40

Regulatory Program: DW NPDES RCRA OMEGA MTC

Client Contact

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 10/8/13

COC No: 2 of 2 COCs

BNSF Railway

Analysis Turnaround Time

Carrier:

Sampler:

2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

CALENDAR DAYS WORKING DAYS
TAT if different from Below 570 TAT
 2 weeks
 1 week
 2 days
 1 day

For Lab Use Only:
Walk-In Client
Lab Sampling:
Job / SDG No.:

Project Name: Parkwater RA

Site: Parkwater, Spokane, WA

P O # BNSF Direct Bill Work Order No. TT10101-N10

Sample Identification

Sample Date

Sample Time

Sample Type (G-Comp, G-Grab)

Matrix

of Cont.

Filtered Sample (Y/N)

Perform MS / MSD (Y/N)

Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag, Ni, Cu, Zn, Mn)

Semivolatile Organics (8270)

PCBs (8082)

Volatile Organic Compounds (8260)

Sample Specific Notes:

Y0-B55-100813
Y0-B56-100813
Y0-RB1-100813

10/8/13 1135
10/8/13 1230
10/8/13 1050

G
↓
↓
W

1
1
1

X
X
X

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client

Disposal by Lab

Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seals Intact: Yes No

Custody Seal No.:

Cooler Temp. (C): Obs'd:

Cont'd:

Therm ID No.:

Retrieved by: *[Signature]*

Company: Kennedy Seals Lossback

Date/Time: 10/8/13 - 1400

Received by: *[Signature]*

Company: TestAmerica

Date/Time: 10/8/13 1405

Retrieved by: *[Signature]*

Company: Kennedy Seals Lossback

Date/Time: 10/8/13 15:33

Received by: *[Signature]*

Company: TestAmerica

Date/Time: 10/9/13 9:40

Retrieved by: *[Signature]*

Company: Kennedy Seals Lossback

Date/Time: 10/8/13 15:33

Received by: *[Signature]*

Company: TestAmerica

Date/Time: 10/9/13 9:40

Cooler/TB DigIR cor 5.1 unc 4.9
Cooler Dsc *[Signature]* @ Lab
WED Packs Packing bubble
[Signature] Folio PC

5.90C

Temperature readings: 3.6 °C - 13:55, put away @ 14:05.

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> pH	<u>Preservative</u> Added (mls)	<u>Lot #</u>
MSB-RB1-100813	580-40770-A-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-B-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-C-5	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100813	580-40770-A-14	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40770-1

Login Number: 40770

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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?	False	Not filled in on CoC
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40770-2
Client Project/Site: Parkwater RA

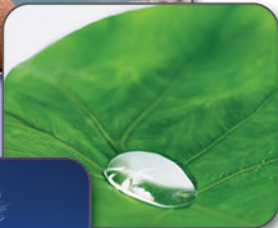
For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/14/2013 3:14:55 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com



LINKS

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results through
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Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Job ID: 580-40770-2

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/9/2013 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146949, for the following sample(s) from silica gel cleanup batch 146999: MSB-SW10-100813 (580-40770-3), MSB-SW8-100813 (580-40770-1), MSB-SW9-100813 (580-40770-2), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and motor oil. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Client Sample ID: MSB-SW8-100813

Lab Sample ID: 580-40770-1

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.3

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	43	Y	26		mg/Kg	☼	10/10/13 11:17	10/10/13 17:38	1
Motor Oil (>C24-C36)	480	Y	52		mg/Kg	☼	10/10/13 11:17	10/10/13 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	103		50 - 150				10/10/13 11:17	10/10/13 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/09/13 17:13	1
Percent Moisture	9.7		0.10		%			10/09/13 17:13	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Client Sample ID: MSB-SW9-100813

Lab Sample ID: 580-40770-2

Date Collected: 10/08/13 11:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 96.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	31	Y	25		mg/Kg	☼	10/10/13 11:17	10/10/13 18:09	1
Motor Oil (>C24-C36)	280	Y	50		mg/Kg	☼	10/10/13 11:17	10/10/13 18:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	103		50 - 150				10/10/13 11:17	10/10/13 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10		%			10/09/13 17:13	1
Percent Moisture	3.3		0.10		%			10/09/13 17:13	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Client Sample ID: MSB-SW10-100813

Lab Sample ID: 580-40770-3

Date Collected: 10/08/13 11:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.5

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	31	Y	26		mg/Kg	☼	10/10/13 11:17	10/10/13 18:24	1
Motor Oil (>C24-C36)	300	Y	53		mg/Kg	☼	10/10/13 11:17	10/10/13 18:24	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	100		50 - 150				10/10/13 11:17	10/10/13 18:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/09/13 17:13	1
Percent Moisture	11		0.10		%			10/09/13 17:13	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Client Sample ID: MSB-BS5-100813

Lab Sample ID: 580-40770-4

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 94.0

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☼	10/10/13 11:17	10/10/13 18:40	1
Motor Oil (>C24-C36)	ND		51		mg/Kg	☼	10/10/13 11:17	10/10/13 18:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	101		50 - 150				10/10/13 11:17	10/10/13 18:40	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			10/09/13 17:13	1
Percent Moisture	6.0		0.10		%			10/09/13 17:13	1



QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146972/1-B
Matrix: Solid
Analysis Batch: 146949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		10/10/13 11:17	10/10/13 16:51	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		10/10/13 11:17	10/10/13 16:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				10/10/13 11:17	10/10/13 16:51	1

Lab Sample ID: LCS 580-146972/2-B
Matrix: Solid
Analysis Batch: 146949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	500	507		mg/Kg		101	64 - 127
Motor Oil (>C24-C36)	500	555		mg/Kg		111	70 - 125
Surrogate	%Recovery	Qualifier	Limits				
<i>o</i> -Terphenyl	108		50 - 150				

Lab Sample ID: LCSD 580-146972/3-B
Matrix: Solid
Analysis Batch: 146949

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	500	503		mg/Kg		101	64 - 127	1	16
Motor Oil (>C24-C36)	500	547		mg/Kg		109	70 - 125	1	17
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	110		50 - 150						

Lab Sample ID: 580-40770-1 DU
Matrix: Solid
Analysis Batch: 146949

Client Sample ID: MSB-SW8-100813
Prep Type: Total/NA
Prep Batch: 146972

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	43	Y	31.4		mg/Kg	☼	32	35
Motor Oil (>C24-C36)	480	Y	379		mg/Kg	☼	24	35
Surrogate	%Recovery	Qualifier	Limits					
<i>o</i> -Terphenyl	98		50 - 150					

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40770-1 DU
Matrix: Solid
Analysis Batch: 146922

Client Sample ID: MSB-SW8-100813
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Solids	90		91		%		0.7	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Method: D 2216 - Percent Moisture (Continued)

Lab Sample ID: 580-40770-1 DU

Matrix: Solid

Analysis Batch: 146922

Client Sample ID: MSB-SW8-100813

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.7		9.1		%		6	20

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- 2
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Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Client Sample ID: MSB-SW8-100813

Lab Sample ID: 580-40770-1

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146972	10/10/13 11:17	WW1	TAL SEA
Total/NA	Cleanup	3630C			146999	10/10/13 15:07	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146949	10/10/13 17:38	JL1	TAL SEA
Total/NA	Analysis	D 2216		1	146922	10/09/13 17:13	PAB	TAL SEA

Client Sample ID: MSB-SW9-100813

Lab Sample ID: 580-40770-2

Date Collected: 10/08/13 11:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146972	10/10/13 11:17	WW1	TAL SEA
Total/NA	Cleanup	3630C			146999	10/10/13 15:07	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146949	10/10/13 18:09	JL1	TAL SEA
Total/NA	Analysis	D 2216		1	146922	10/09/13 17:13	PAB	TAL SEA

Client Sample ID: MSB-SW10-100813

Lab Sample ID: 580-40770-3

Date Collected: 10/08/13 11:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146972	10/10/13 11:17	WW1	TAL SEA
Total/NA	Cleanup	3630C			146999	10/10/13 15:07	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146949	10/10/13 18:24	JL1	TAL SEA
Total/NA	Analysis	D 2216		1	146922	10/09/13 17:13	PAB	TAL SEA

Client Sample ID: MSB-BS5-100813

Lab Sample ID: 580-40770-4

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			146972	10/10/13 11:17	WW1	TAL SEA
Total/NA	Cleanup	3630C			146999	10/10/13 15:07	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146949	10/10/13 18:40	JL1	TAL SEA
Total/NA	Analysis	D 2216		1	146922	10/09/13 17:13	PAB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40770-1	MSB-SW8-100813	Solid	10/08/13 11:20	10/09/13 09:40
580-40770-2	MSB-SW9-100813	Solid	10/08/13 11:25	10/09/13 09:40
580-40770-3	MSB-SW10-100813	Solid	10/08/13 11:30	10/09/13 09:40
580-40770-4	MSB-BS5-100813	Solid	10/08/13 11:35	10/09/13 09:40

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TestAmerica Seattle
5755 8th Street East

580-40770 Chain of Custody



Chain of Custody Record

40 770

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA OMTCA MTLA

TestAmerica Laboratories, Inc.

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-4N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen
Date: 10/8/13

Carrier:
COC No:
1 of 2 COCs

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below:
 2 weeks
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCL Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (14944/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NWTPH-DX W/SLKA	LEEL CLEAN UP	DIESEL & OIL TANKS	Sample Specific Notes:
MSB-5W8-100813	10/8/13	1120	L1	S	1	X	X					X			1-DAY TAT
MSB-5W9-100813		1125		S	1	X	X					X			
MSB-5W10-100813		1130		S	1	X	X					X			
MSB-B55-100813		1135		S	1	X	X					X			
MSB-B31-100813		1215		S	3	X	X					X			* STD TAT
Y0-5W5-100813		1045		S	1	X	X								
Y0-5W6-100813		1120		S	1	X	X								
Y0-5W7-100813		1145		S	1	X	X								
Y0-5W8-100813		1225		S	1	X	X								
Y0-5W9-100813		1235		S	1	X	X								
Y0-5W105-100813		1045		S	1	X	X								

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Return to Client Disposed by Lab Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seals Intact: Yes No

Relinquished by:
Relinquished by:
Relinquished by:

Company:
Company:
Company:

Date/Time:
Date/Time:
Date/Time:

Received by:
Received by:
Received In Laboratory by:

Company:
Company:
Company:

Form No. CA-C-M-002, Rev. 4.2, dated 04/02/2013

TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

40710

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA OMEGA MTC

TestAmerica Laboratories, Inc

Client Contact: Bruce Sheppard
Project Manager: Howard Young
Site Contact: Howard Young
Date: 10/8/13

Tel/fax: 206-419-8629/ 253-952-3435
Lab Contact: Kris Allen
Carrier:
COC No:
of COCs

BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 570 TAT
 2 weeks
 1 week
 2 days
 1 day

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT10101-N10
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (G-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag, Ni, P, H/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Sample Specific Notes:
Y0-B55-100813	10/8/13	1135	G	S	1		X					R STD TAT
Y0-B56-100813	10/8/13	1230	G	↓	1		X					B
Y0-RB1-100813	10/8/13	1050	G	↓	1		X					B ↓

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for 1 Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Cooler/TB DigIR cor 5.1 unc 4.9
Cooler Dsc publwh @ Lab
WED Packs Packing bubble
w/co Fisher PC

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.
Custody Seals Intact: Yes No
Custody Seal No.:
Custody Temp. (C): Obs'd:
Therm ID No.:
5.90C

Relinquished by: [Signature]
Company: Kenedy Seals Lossback
Date/Time: 10/8/13 1400
Received by: [Signature]
Company: TestAmerica
Date/Time: 10/8/13 1405

Relinquished by: [Signature]
Company: Kenedy Seals Lossback
Date/Time: 10/8/13 1400
Received by: [Signature]
Company: TestAmerica
Date/Time: 10/8/13 1405

Relinquished by: [Signature]
Company: Kenedy Seals Lossback
Date/Time: 10/8/13 1400
Received by: [Signature]
Company: TestAmerica
Date/Time: 10/8/13 1405

Temperature readings: 3.6 °C - 13:55, put away @ 14:05.

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> pH	<u>Preservative</u> Added (mls)	<u>Lot #</u>
MSB-RB1-100813	580-40770-A-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-B-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-C-5	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100813	580-40770-A-14	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40770-2

Login Number: 40770

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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?	False	Not filled in on CoC
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40770-3
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/10/2013 4:44:00 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Job ID: 580-40770-3

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/9/2013 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

Metals

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Client Sample ID: MSB-SW8-100813

Lab Sample ID: 580-40770-1

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		0.44		mg/Kg	✱	10/09/13 15:43	10/10/13 09:25	10
Barium	68		0.18		mg/Kg	✱	10/09/13 15:43	10/10/13 09:25	10
Cadmium	ND		0.18		mg/Kg	✱	10/09/13 15:43	10/10/13 09:25	10
Chromium	17		0.18		mg/Kg	✱	10/09/13 15:43	10/10/13 09:25	10

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Client Sample ID: MSB-SW9-100813

Lab Sample ID: 580-40770-2

Date Collected: 10/08/13 11:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 96.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.7		0.38		mg/Kg	✱	10/09/13 15:43	10/10/13 09:38	10
Barium	86		0.15		mg/Kg	✱	10/09/13 15:43	10/10/13 09:38	10
Cadmium	ND		0.15		mg/Kg	✱	10/09/13 15:43	10/10/13 09:38	10
Chromium	9.6		0.15		mg/Kg	✱	10/09/13 15:43	10/10/13 09:38	10

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Client Sample ID: MSB-SW10-100813

Lab Sample ID: 580-40770-3

Date Collected: 10/08/13 11:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.37		mg/Kg	✱	10/09/13 15:43	10/10/13 09:42	10
Barium	120		0.15		mg/Kg	✱	10/09/13 15:43	10/10/13 09:42	10
Cadmium	ND		0.15		mg/Kg	✱	10/09/13 15:43	10/10/13 09:42	10
Chromium	18		0.15		mg/Kg	✱	10/09/13 15:43	10/10/13 09:42	10



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Client Sample ID: MSB-BS5-100813

Lab Sample ID: 580-40770-4

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 94.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.1		0.40		mg/Kg	✱	10/09/13 15:43	10/10/13 09:46	10
Barium	27		0.16		mg/Kg	✱	10/09/13 15:43	10/10/13 09:46	10
Cadmium	ND		0.16		mg/Kg	✱	10/09/13 15:43	10/10/13 09:46	10
Chromium	4.8		0.16		mg/Kg	✱	10/09/13 15:43	10/10/13 09:46	10

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146911/21-A
Matrix: Solid
Analysis Batch: 146969

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/09/13 15:43	10/10/13 07:59	10
Barium	ND		0.20		mg/Kg		10/09/13 15:43	10/10/13 07:59	10
Cadmium	ND		0.20		mg/Kg		10/09/13 15:43	10/10/13 07:59	10
Chromium	ND		0.20		mg/Kg		10/09/13 15:43	10/10/13 07:59	10

Lab Sample ID: LCS 580-146911/22-A
Matrix: Solid
Analysis Batch: 146969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	203		mg/Kg		101	80 - 120
Barium	200	201		mg/Kg		101	80 - 120
Cadmium	5.00	4.48		mg/Kg		90	80 - 120
Chromium	20.0	20.8		mg/Kg		104	80 - 120

Lab Sample ID: LCSD 580-146911/23-A
Matrix: Solid
Analysis Batch: 146969

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146911

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	204		mg/Kg		102	80 - 120	1	20
Barium	200	198		mg/Kg		99	80 - 120	2	20
Cadmium	5.00	4.81		mg/Kg		96	80 - 120	7	20
Chromium	20.0	20.9		mg/Kg		104	80 - 120	0	20

Lab Sample ID: LCSSRM 580-146911/24-A
Matrix: Solid
Analysis Batch: 146969

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146911

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	237	260		mg/Kg		109.6	71.3 - 129.1
Barium	252	265		mg/Kg		105.1	73.8 - 126.2
Cadmium	191	196		mg/Kg		102.6	73.3 - 126.7
Chromium	128	138		mg/Kg		107.8	65.5 - 129.7

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Client Sample ID: MSB-SW8-100813

Lab Sample ID: 580-40770-1

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146911	10/09/13 15:43	PAB	TAL SEA
Total/NA	Analysis	6020		10	146969	10/10/13 09:25	FCW	TAL SEA

Client Sample ID: MSB-SW9-100813

Lab Sample ID: 580-40770-2

Date Collected: 10/08/13 11:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146911	10/09/13 15:43	PAB	TAL SEA
Total/NA	Analysis	6020		10	146969	10/10/13 09:38	FCW	TAL SEA

Client Sample ID: MSB-SW10-100813

Lab Sample ID: 580-40770-3

Date Collected: 10/08/13 11:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146911	10/09/13 15:43	PAB	TAL SEA
Total/NA	Analysis	6020		10	146969	10/10/13 09:42	FCW	TAL SEA

Client Sample ID: MSB-BS5-100813

Lab Sample ID: 580-40770-4

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146911	10/09/13 15:43	PAB	TAL SEA
Total/NA	Analysis	6020		10	146969	10/10/13 09:46	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40770-1	MSB-SW8-100813	Solid	10/08/13 11:20	10/09/13 09:40
580-40770-2	MSB-SW9-100813	Solid	10/08/13 11:25	10/09/13 09:40
580-40770-3	MSB-SW10-100813	Solid	10/08/13 11:30	10/09/13 09:40
580-40770-4	MSB-BS5-100813	Solid	10/08/13 11:35	10/09/13 09:40

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TestAmerica Seattle
5755 8th Street East

580-40770 Chain of Custody



Chain of Custody Record

40 770

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA

OMTCA MTLA

TestAmerica Laboratories, Inc.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Bruce Sheppard

Project Manager: Howard Young

Site Contact: Howard Young

Date: 10/8/13

COC No: 1 of 2 COCs

BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 2 weeks 1 week 2 days 1 day

Lab Contact: Kris Allen

Carrier:

Sampler: 1
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-4N10

Sample Identification

Sample Date

Sample Time

Sample Type (C-Comp, G-Grab)

Matrix

of Cont.

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOT Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (14944/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NWTPH-DX W/SLKA	LEEL CLEAN UP	DIESEL & OIL TANKS	Carrier	Date	COC No	Sample Specific Notes
MSB-5W8-100813	10/8/13	1120	G	S	1	X	X					X				1	1-DAY TAT	
MSB-5W9-100813		1125	G	S	1	X	X					X				2		
MSB-5W10-100813		1130	G	S	1	X	X					X				3		
MSB-B55-100813		1135	G	S	1	X	X					X				4		
MSB-B31-100813		1215	G	S	3	X	X					X				5	*STD TAT	
Y0-5W5-100813		1045	G	S	1	X	X									6		
Y0-5W6-100813		1120	G	S	1	X	X									7		
Y0-5W7-100813		1145	G	S	1	X	X									8		
Y0-5W8-100813		1225	G	S	1	X	X									9		
Y0-5W9-100813		1235	G	S	1	X	X									10		
Y0-5W105-100813		1045	G	S	1	X	X									11		

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown Return to Client Disposed by Lab Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Cooler Temp. (°C): Obs'd: _____ Cor'd: _____ Therm ID No.: _____
5.9°C

Custody Seals Intact: Yes No
Custody Seal No.: _____
Relinquished by: *[Signature]* Company: Kennedy Tank Containers Date/Time: 10/8/13 1400

Relinquished by: *[Signature]* Company: TCS-Havenra Date/Time: 10/8/13 15:30
Received by: *[Signature]* Company: TestAmerica Date/Time: 10/9/13 9:40
Received in Laboratory by: *[Signature]* Company: TCS Date/Time: _____

TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

40710

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA OMEGA MTCA

TestAmerica Laboratories, Inc

Client Contact: Bruce Sheppard
Project Manager: Howard Young
Site Contact: Howard Young
Date: 10/8/13

BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451
Tel/Fax: 206-419-8629/ 253-952-3435
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 570 TAT
2 weeks
1 week
2 days
1 day

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT10101-N10
Carrier: 10/8/13

Sample Identification	Sample Date	Sample Time	Sample Type (G-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	COC No.:
Y0-B55-100813	10/8/13	1135	G	S	1	X	Not Analyzed (As, Pb, Cd, Cr, Ba, Hg, Se, Ag, Ni, P, H/6020) <u>6 total</u>	2 of 2 COCS
Y0-B56-100813	10/8/13	1230	G	W	1	X		
Y0-RB1-100813	10/8/13	1050	G	W	1	X		

Semivolatile Organics (8270)
PCBs (8082)
Volatile Organic Compounds (8260)
Sample Specific Notes:
STD TAT

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for 1 Months

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other
Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.
Cooler/TB DigIR cor 5.1 unc 4.9
Cooler Dsc publwh @ Lab
WED Packs Packing bubble
W/Ca Filter PC

Custody Seals Intact: Yes No
Custody Seal No.:
Custody Temp. (C): Obs'd: 5.90C
Therm ID No.:
Received by: [Signature]
Received in Laboratory by: [Signature]

Relinquished by: [Signature] Company: Kenedy Seals Lossback Date/Time: 10/8/13 1400
Relinquished by: [Signature] Company: TestAmerica Date/Time: 10/8/13 1405
Relinquished by: [Signature] Company: TestAmerica Date/Time: 10/9/13 9:40

Temperature readings: 3.6 °C - 13:55, put away @ 14:05.

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> pH	<u>Preservative</u> Added (mls)	<u>Lot #</u>
MSB-RB1-100813	580-40770-A-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-B-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-C-5	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100813	580-40770-A-14	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40770-3

Login Number: 40770

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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?	False	Not filled in on CoC
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40857-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Terry Parks

Kristine D. Allen

Authorized for release by:
10/24/2013 4:27:16 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com



LINKS

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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Job ID: 580-40857-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The sample was received on 10/11/2013 9:45 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

GC Semi VOA

Method(s) NWTPH-Dx: In analytical batch 147517, for the following sample(s) from preparation batch 147529: (580-40857-1 DU), MSB-BS6-101013 (580-40857-1), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of weathered/degraded diesel fuel and motor oil. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Client Sample ID: MSB-BS6-101013

Lab Sample ID: 580-40857-1

Date Collected: 10/10/13 12:00

Matrix: Solid

Date Received: 10/11/13 09:45

Percent Solids: 80.5

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	69	Y	30		mg/Kg	☼	10/18/13 11:10	10/18/13 18:17	1
Motor Oil (>C24-C36)	380	Y	61		mg/Kg	☼	10/18/13 11:10	10/18/13 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	92		50 - 150				10/18/13 11:10	10/18/13 18:17	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.2		0.59		mg/Kg	☼	10/22/13 12:29	10/22/13 17:41	10
Barium	62		0.24		mg/Kg	☼	10/22/13 12:29	10/22/13 17:41	10
Cadmium	ND		0.24		mg/Kg	☼	10/22/13 12:29	10/22/13 17:41	10
Chromium	12		0.24		mg/Kg	☼	10/22/13 12:29	10/22/13 17:41	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			10/17/13 08:26	1
Percent Moisture	20		0.10		%			10/17/13 08:26	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-147529/1-B
Matrix: Solid
Analysis Batch: 147517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		10/18/13 11:10	10/18/13 17:30	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		10/18/13 11:10	10/18/13 17:30	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				10/18/13 11:10	10/18/13 17:30	1

Lab Sample ID: LCS 580-147529/2-B
Matrix: Solid
Analysis Batch: 147517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	500	489		mg/Kg		98	64 - 127
Motor Oil (>C24-C36)	500	538		mg/Kg		108	70 - 125
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	94		50 - 150				

Lab Sample ID: LCSD 580-147529/3-B
Matrix: Solid
Analysis Batch: 147517

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147529

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	500	497		mg/Kg		99	64 - 127	2	16
Motor Oil (>C24-C36)	500	551		mg/Kg		110	70 - 125	2	17
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	93		50 - 150						

Lab Sample ID: 580-40857-1 DU
Matrix: Solid
Analysis Batch: 147517

Client Sample ID: MSB-BS6-101013
Prep Type: Total/NA
Prep Batch: 147529

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	69	Y	53.8	Y	mg/Kg	☼	25	35
Motor Oil (>C24-C36)	380	Y	360	Y	mg/Kg	☼	4	35
Surrogate	DU %Recovery	DU Qualifier	Limits					
<i>o</i> -Terphenyl	90		50 - 150					

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147762/22-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/22/13 12:29	10/22/13 15:47	10

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-147762/22-A

Matrix: Solid

Analysis Batch: 147786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.20		mg/Kg		10/22/13 12:29	10/22/13 15:47	10
Cadmium	ND		0.20		mg/Kg		10/22/13 12:29	10/22/13 15:47	10
Chromium	ND		0.20		mg/Kg		10/22/13 12:29	10/22/13 15:47	10

Lab Sample ID: LCS 580-147762/23-A

Matrix: Solid

Analysis Batch: 147786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	202		mg/Kg		101	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.69		mg/Kg		94	80 - 120
Chromium	20.0	19.9		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 580-147762/24-A

Matrix: Solid

Analysis Batch: 147786

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 147762

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	200		mg/Kg		100	80 - 120	1	20
Barium	200	193		mg/Kg		96	80 - 120	1	20
Cadmium	5.00	4.51		mg/Kg		90	80 - 120	4	20
Chromium	20.0	19.7		mg/Kg		99	80 - 120	1	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Client Sample ID: MSB-BS6-101013

Lab Sample ID: 580-40857-1

Date Collected: 10/10/13 12:00

Matrix: Solid

Date Received: 10/11/13 09:45

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147529	10/18/13 11:10	WW1	TAL SEA
Total/NA	Cleanup	3630C			147568	10/18/13 15:29	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147517	10/18/13 18:17	JJP	TAL SEA
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:41	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147414	10/17/13 08:26	RMB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40857-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40857-1	MSB-BS6-101013	Solid	10/10/13 12:00	10/11/13 09:45

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Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

40857
OMEGA MITLA

TestAmerica Laboratories, Inc.
COC No. 1 of 1 COCs

Regulatory Program: DW NPDES RCRA OMEGA MITLA

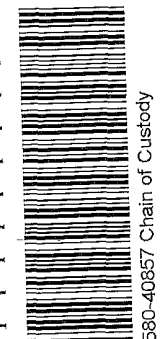
Project Manager: Howard Young
Tel/Fax: 206-419-8629/253-952-3435

Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 71A
Seattle, Washington 98134-1454

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below STD TAT

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT10101-N10

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Trace Metals (As, Cd, Cr, Ba)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Carrier	Date
MSB-B56-101013	10/10/13	1200	6	5	1	✓	✓						10/10/13
Cooler/TB Dig IR cor 49 unclA Cooler Discard Dig IR cor Lab Wet Packs Packing Tube WCS. Fedex PD													



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seal No.: _____
Cooler Temp. (C): Obs'd: _____
Therm ID No.: _____

Relinquished by: [Signature] Date/Time: 10/10/13 13:40
Company: TestAmerica

Relinquished by: [Signature] Date/Time: 10/10/13 15:45
Company: ASIA

Relinquished by: [Signature] Date/Time: _____
Company: _____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40857-1

Login Number: 40857

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

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?	False	no
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	No Lot # labels.
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.	N/A	
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-46454-1

Client Project/Site: Parkwater Excavation
Revision: 1

For:

Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Laura Himes



Authorized for release by:
4/1/2015 11:30:30 AM

Kim Presley, Project Management Assistant I
(253)922-2310
kim.presley@testamericainc.com

Designee for

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Job ID: 580-46454-1

Laboratory: TestAmerica Seattle

Narrative

Revised report 4/1/15. Barium analysis added.

**Job Narrative
580-46454-1**

Comments

No additional comments.

Receipt

The samples were received on 11/21/2014 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

Except:

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. MSB-SW-11-111914 INCLUDED ONE CONTAINER. COC LISTS TWO CONTAINERS.

The container labels for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): MSB-BS-11-112014 AND MSB-SW-22-112014. The container labels list SAMPLE COLLECTION TIMES OF 16:05 AND 16:10, while the COC lists COLLECTION TIMES OF 14:05 AND 14:10.

GC Semi VOA

Method(s) NWTPH-Dx: In analysis batch 176646, for the following sample(s) from preparation batch 176677: The following sample(s) contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MSB-BS-7-111914 (580-46454-6), MSB-SW-12-111914 (580-46454-2), MSB-SW-14-111914 (580-46454-5), MSB-SW-15-111914 (580-46454-7), MSB-SW-16-112014 (580-46454-9).

Method(s) NWTPH-Dx: In analysis batch 177101, for the following sample from preparation batch 177058: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MSB-SW-11-111914 (580-46454-1), MSB-SW-18-112014 (580-46454-12).

Method(s) NWTPH-Dx: In analysis batch 177101 the sample duplicate (DUP) precision was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

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

Metals

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

General Chemistry

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

Organic Prep

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

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.
F3	Duplicate RPD exceeds the control limit

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-11-111914

Lab Sample ID: 580-46454-1

Date Collected: 11/19/14 11:20

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.5

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	68	Y	26		mg/Kg	☼	12/01/14 12:18	12/02/14 15:38	1
Motor Oil (>C24-C36)	300	Y	53		mg/Kg	☼	12/01/14 12:18	12/02/14 15:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	111		50 - 150				12/01/14 12:18	12/02/14 15:38	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.7		0.45		mg/Kg	☼	11/25/14 12:14	11/26/14 16:55	10
Cadmium	ND		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 16:55	10
Chromium	15	F1	0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 16:55	10
Barium	64	F1	0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 16:55	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			11/25/14 17:12	1
Percent Moisture	7.5		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-12-111914

Lab Sample ID: 580-46454-2

Date Collected: 11/19/14 12:15

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 90.1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	93	Y	27		mg/Kg	☼	11/24/14 11:10	11/25/14 14:44	1
Motor Oil (>C24-C36)	120	Y	55		mg/Kg	☼	11/24/14 11:10	11/25/14 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				11/24/14 11:10	11/25/14 14:44	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.5		0.49		mg/Kg	☼	11/25/14 12:14	11/26/14 17:19	10
Cadmium	ND		0.20		mg/Kg	☼	11/25/14 12:14	11/26/14 17:19	10
Chromium	17		0.20		mg/Kg	☼	11/25/14 12:14	11/26/14 17:19	10
Barium	130		0.20		mg/Kg	☼	11/25/14 12:14	11/26/14 17:19	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			11/25/14 17:12	1
Percent Moisture	9.9		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-6-111914

Lab Sample ID: 580-46454-3

Date Collected: 11/19/14 12:25

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.8

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	11/24/14 11:10	11/25/14 15:16	1
Motor Oil (>C24-C36)	ND		54		mg/Kg	☼	11/24/14 11:10	11/25/14 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				11/24/14 11:10	11/25/14 15:16	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.2		0.42		mg/Kg	☼	11/25/14 12:14	11/26/14 17:23	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:23	10
Chromium	16		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:23	10
Barium	57		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:23	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			11/25/14 17:12	1
Percent Moisture	8.2		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-13-111914

Lab Sample ID: 580-46454-4

Date Collected: 11/19/14 12:30

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 89.3

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	11/24/14 11:10	11/25/14 15:53	1
Motor Oil (>C24-C36)	ND		55		mg/Kg	☼	11/24/14 11:10	11/25/14 15:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	80		50 - 150				11/24/14 11:10	11/25/14 15:53	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.43		mg/Kg	☼	11/25/14 12:14	11/26/14 17:26	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:26	10
Chromium	17		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:26	10
Barium	110		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:26	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			11/25/14 17:12	1
Percent Moisture	11		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-14-111914

Lab Sample ID: 580-46454-5

Date Collected: 11/19/14 14:15

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.5

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	67	Y	27		mg/Kg	☼	11/24/14 11:10	11/25/14 16:11	1
Motor Oil (>C24-C36)	ND		53		mg/Kg	☼	11/24/14 11:10	11/25/14 16:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				11/24/14 11:10	11/25/14 16:11	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.7		0.46		mg/Kg	☼	11/25/14 12:14	11/26/14 17:30	10
Cadmium	ND		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:30	10
Chromium	16		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:30	10
Barium	110		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:30	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			11/25/14 17:12	1
Percent Moisture	8.5		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-7-111914

Lab Sample ID: 580-46454-6

Date Collected: 11/19/14 14:20

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 93.2

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	53	Y	26		mg/Kg	☼	11/24/14 11:10	11/25/14 16:29	1
Motor Oil (>C24-C36)	58	Y	52		mg/Kg	☼	11/24/14 11:10	11/25/14 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				11/24/14 11:10	11/25/14 16:29	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		0.40		mg/Kg	☼	11/25/14 12:14	11/26/14 17:33	10
Cadmium	ND		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 17:33	10
Chromium	16		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 17:33	10
Barium	80		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 17:33	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			11/25/14 17:12	1
Percent Moisture	6.8		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-15-111914

Lab Sample ID: 580-46454-7

Date Collected: 11/19/14 14:25

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 84.1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	730	Y	29		mg/Kg	☼	11/24/14 11:10	11/25/14 16:47	1
Motor Oil (>C24-C36)	1700	Y	58		mg/Kg	☼	11/24/14 11:10	11/25/14 16:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	105		50 - 150				11/24/14 11:10	11/25/14 16:47	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.8		0.44		mg/Kg	☼	11/25/14 12:14	11/26/14 17:36	10
Cadmium	0.39		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:36	10
Chromium	17		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:36	10
Barium	270		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:36	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			11/25/14 17:12	1
Percent Moisture	16		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-8-111914

Lab Sample ID: 580-46454-8

Date Collected: 11/19/14 15:30

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 93.9

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☼	11/24/14 11:10	11/25/14 17:23	1
Motor Oil (>C24-C36)	ND		52		mg/Kg	☼	11/24/14 11:10	11/25/14 17:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				11/24/14 11:10	11/25/14 17:23	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.3		0.43		mg/Kg	☼	11/25/14 12:14	11/26/14 17:40	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:40	10
Chromium	8.5		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:40	10
Barium	36		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:40	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			11/25/14 17:12	1
Percent Moisture	6.1		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-16-112014

Lab Sample ID: 580-46454-9

Date Collected: 11/20/14 08:05

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.7

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	86	Y	27		mg/Kg	☼	11/24/14 11:10	11/25/14 17:41	1
Motor Oil (>C24-C36)	ND		54		mg/Kg	☼	11/24/14 11:10	11/25/14 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	83		50 - 150				11/24/14 11:10	11/25/14 17:41	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.6		0.41		mg/Kg	☼	11/25/14 12:14	11/26/14 17:43	10
Cadmium	ND		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 17:43	10
Chromium	15		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 17:43	10
Barium	68		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 17:43	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			11/25/14 17:12	1
Percent Moisture	8.3		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-17-112014

Lab Sample ID: 580-46454-10

Date Collected: 11/20/14 08:10

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 89.2

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		28		mg/Kg	☼	12/01/14 12:18	12/02/14 16:16	1
Motor Oil (>C24-C36)	ND		55		mg/Kg	☼	12/01/14 12:18	12/02/14 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	109		50 - 150				12/01/14 12:18	12/02/14 16:16	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.44		mg/Kg	☼	11/25/14 12:14	11/26/14 17:47	10
Cadmium	0.19		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:47	10
Chromium	16		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:47	10
Barium	120		0.18		mg/Kg	☼	11/25/14 12:14	11/26/14 17:47	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			11/25/14 17:12	1
Percent Moisture	11		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-9-112014

Lab Sample ID: 580-46454-11

Date Collected: 11/20/14 09:35

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 94.0

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	12/01/14 12:18	12/02/14 16:35	1
Motor Oil (>C24-C36)	ND		51		mg/Kg	☼	12/01/14 12:18	12/02/14 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	109		50 - 150				12/01/14 12:18	12/02/14 16:35	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.2		0.42		mg/Kg	☼	11/25/14 12:14	11/26/14 17:50	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:50	10
Chromium	11		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:50	10
Barium	46		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 17:50	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			11/25/14 17:12	1
Percent Moisture	6.0		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-18-112014

Lab Sample ID: 580-46454-12

Date Collected: 11/20/14 10:45

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.2

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	36	Y	26		mg/Kg	☼	12/01/14 12:18	12/02/14 16:53	1
Motor Oil (>C24-C36)	79	Y	52		mg/Kg	☼	12/01/14 12:18	12/02/14 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	107		50 - 150				12/01/14 12:18	12/02/14 16:53	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.4		0.44		mg/Kg	☼	11/25/14 12:14	11/26/14 18:01	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 18:01	10
Chromium	18		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 18:01	10
Barium	71		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 18:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			11/25/14 17:12	1
Percent Moisture	7.8		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-19-112014

Lab Sample ID: 580-46454-13

Date Collected: 11/20/14 10:50

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.0

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	12/01/14 12:18	12/02/14 17:12	1
Motor Oil (>C24-C36)	61	Y	53		mg/Kg	☼	12/01/14 12:18	12/02/14 17:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	105		50 - 150				12/01/14 12:18	12/02/14 17:12	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.0		0.39		mg/Kg	☼	11/25/14 12:14	11/26/14 18:04	10
Cadmium	ND		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 18:04	10
Chromium	16		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 18:04	10
Barium	78		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 18:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			11/25/14 17:12	1
Percent Moisture	8.0		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-10-112014

Lab Sample ID: 580-46454-14

Date Collected: 11/20/14 12:20

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 93.8

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	12/01/14 12:18	12/02/14 17:31	1
Motor Oil (>C24-C36)	ND		51		mg/Kg	☼	12/01/14 12:18	12/02/14 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	103		50 - 150				12/01/14 12:18	12/02/14 17:31	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.2		0.43		mg/Kg	☼	11/25/14 12:14	11/26/14 18:08	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 18:08	10
Chromium	16		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 18:08	10
Barium	59		0.17		mg/Kg	☼	11/25/14 12:14	11/26/14 18:08	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			11/25/14 17:12	1
Percent Moisture	6.2		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-20-112014

Lab Sample ID: 580-46454-15

Date Collected: 11/20/14 13:45

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.5

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☼	12/01/14 12:18	12/02/14 18:08	1
Motor Oil (>C24-C36)	150	Y	52		mg/Kg	☼	12/01/14 12:18	12/02/14 18:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	104		50 - 150				12/01/14 12:18	12/02/14 18:08	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.5		0.47		mg/Kg	☼	11/25/14 12:14	11/26/14 18:11	10
Cadmium	ND		0.19		mg/Kg	☼	11/25/14 12:14	11/26/14 18:11	10
Chromium	13		0.19		mg/Kg	☼	11/25/14 12:14	11/26/14 18:11	10
Barium	63		0.19		mg/Kg	☼	11/25/14 12:14	11/26/14 18:11	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			11/25/14 17:12	1
Percent Moisture	8.5		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-21-112014

Lab Sample ID: 580-46454-16

Date Collected: 11/20/14 13:50

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 86.2

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		28		mg/Kg	☼	12/01/14 12:18	12/02/14 18:27	1
Motor Oil (>C24-C36)	ND		56		mg/Kg	☼	12/01/14 12:18	12/02/14 18:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				12/01/14 12:18	12/02/14 18:27	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		0.38		mg/Kg	☼	11/25/14 12:14	11/26/14 18:15	10
Cadmium	ND		0.15		mg/Kg	☼	11/25/14 12:14	11/26/14 18:15	10
Chromium	15		0.15		mg/Kg	☼	11/25/14 12:14	11/26/14 18:15	10
Barium	70		0.15		mg/Kg	☼	11/25/14 12:14	11/26/14 18:15	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			11/25/14 17:12	1
Percent Moisture	14		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-11-112014

Lab Sample ID: 580-46454-17

Date Collected: 11/20/14 14:05

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 95.6

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	12/01/14 12:18	12/02/14 18:45	1
Motor Oil (>C24-C36)	82	Y	50		mg/Kg	☼	12/01/14 12:18	12/02/14 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	111		50 - 150				12/01/14 12:18	12/02/14 18:45	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.5		0.39		mg/Kg	☼	11/25/14 12:14	11/26/14 18:18	10
Cadmium	ND		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 18:18	10
Chromium	6.8		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 18:18	10
Barium	29		0.16		mg/Kg	☼	11/25/14 12:14	11/26/14 18:18	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10		%			11/25/14 17:12	1
Percent Moisture	4.4		0.10		%			11/25/14 17:12	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-22-112014

Lab Sample ID: 580-46454-18

Date Collected: 11/20/14 14:10

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	12/01/14 12:18	12/02/14 19:04	1
Motor Oil (>C24-C36)	ND		53		mg/Kg	☼	12/01/14 12:18	12/02/14 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	112		50 - 150				12/01/14 12:18	12/02/14 19:04	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3		0.42		mg/Kg	☼	11/25/14 12:14	12/03/14 11:27	10
Cadmium	ND		0.17		mg/Kg	☼	11/25/14 12:14	12/03/14 11:27	10
Chromium	15		0.17		mg/Kg	☼	11/25/14 12:14	12/03/14 11:27	10
Barium	74		0.17		mg/Kg	☼	11/25/14 12:14	12/03/14 11:27	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			11/25/14 17:12	1
Percent Moisture	7.9		0.10		%			11/25/14 17:12	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-176555/1-B
Matrix: Solid
Analysis Batch: 176646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176555

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		11/24/14 11:10	11/25/14 13:50	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		11/24/14 11:10	11/25/14 13:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				11/24/14 11:10	11/25/14 13:50	1

Lab Sample ID: LCS 580-176555/2-B
Matrix: Solid
Analysis Batch: 176646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176555

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	500	487		mg/Kg		97	64 - 127
Motor Oil (>C24-C36)	502	546		mg/Kg		109	70 - 125
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	96		50 - 150				

Lab Sample ID: LCSD 580-176555/3-B
Matrix: Solid
Analysis Batch: 176646

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 176555

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	500	498		mg/Kg		100	64 - 127	2	16
Motor Oil (>C24-C36)	502	561		mg/Kg		112	70 - 125	3	17
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	95		50 - 150						

Lab Sample ID: 580-46454-3 DU
Matrix: Solid
Analysis Batch: 176646

Client Sample ID: MSB-BS-6-111914
Prep Type: Total/NA
Prep Batch: 176555

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	ND		ND		mg/Kg	☼	NC	35
Motor Oil (>C24-C36)	ND		ND		mg/Kg	☼	NC	35
Surrogate	DU %Recovery	DU Qualifier	Limits					
<i>o</i> -Terphenyl	92		50 - 150					

Lab Sample ID: MB 580-177032/1-B
Matrix: Solid
Analysis Batch: 177101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177032

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		12/01/14 12:18	12/02/14 14:42	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		12/01/14 12:18	12/02/14 14:42	1

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

(Continued)

Lab Sample ID: MB 580-177032/1-B

Matrix: Solid

Analysis Batch: 177101

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 177032

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	110		50 - 150	12/01/14 12:18	12/02/14 14:42	1

Lab Sample ID: LCS 580-177032/2-B

Matrix: Solid

Analysis Batch: 177101

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 177032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
#2 Diesel (C10-C24)	500	464		mg/Kg		93	64 - 127	
Motor Oil (>C24-C36)	502	487		mg/Kg		97	70 - 125	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	90		50 - 150

Lab Sample ID: LCSD 580-177032/3-B

Matrix: Solid

Analysis Batch: 177101

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 177032

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits		RPD	Limit
#2 Diesel (C10-C24)	500	504		mg/Kg		101	64 - 127	8	16	
Motor Oil (>C24-C36)	502	525		mg/Kg		105	70 - 125	7	17	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	100		50 - 150

Lab Sample ID: 580-46454-1 DU

Matrix: Solid

Analysis Batch: 177101

Client Sample ID: MSB-SW-11-111914

Prep Type: Total/NA

Prep Batch: 177032

Analyte	Sample Result	Sample Qualifier	DU DU		Unit	D	RPD	Limit
			Result	Qualifier				
#2 Diesel (C10-C24)	68	Y	33.7	F3	mg/Kg	☼	68	35
Motor Oil (>C24-C36)	300	Y	105	F3	mg/Kg	☼	96	35

Surrogate	DU DU		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	106		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-176711/22-A

Matrix: Solid

Analysis Batch: 176984

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 176711

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.50		mg/Kg		11/25/14 12:14	11/26/14 16:41	10
Cadmium	ND		0.20		mg/Kg		11/25/14 12:14	11/26/14 16:41	10
Chromium	ND		0.20		mg/Kg		11/25/14 12:14	11/26/14 16:41	10
Barium	ND		0.20		mg/Kg		11/25/14 12:14	11/26/14 16:41	10

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-176711/23-A
Matrix: Solid
Analysis Batch: 176984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	197		mg/Kg		98	80 - 120
Cadmium	5.00	5.11		mg/Kg		102	80 - 120
Chromium	20.0	20.2		mg/Kg		101	80 - 120
Barium	200	200		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 580-176711/24-A
Matrix: Solid
Analysis Batch: 176984

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	197		mg/Kg		99	80 - 120	0	20
Cadmium	5.00	5.33		mg/Kg		107	80 - 120	4	20
Chromium	20.0	20.4		mg/Kg		102	80 - 120	1	20
Barium	200	204		mg/Kg		102	80 - 120	2	20

Lab Sample ID: 580-46454-1 MS
Matrix: Solid
Analysis Batch: 176984

Client Sample ID: MSB-SW-11-111914
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	5.7		175	198		mg/Kg	☼	110	80 - 120
Cadmium	ND		4.37	4.81		mg/Kg	☼	108	80 - 120
Chromium	15	F1	17.5	39.3	F1	mg/Kg	☼	137	80 - 120
Barium	64	F1	175	278	F1	mg/Kg	☼	122	80 - 120

Lab Sample ID: 580-46454-1 MSD
Matrix: Solid
Analysis Batch: 176984

Client Sample ID: MSB-SW-11-111914
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	5.7		158	174		mg/Kg	☼	106	80 - 120	13	20
Cadmium	ND		3.95	4.17		mg/Kg	☼	103	80 - 120	14	20
Chromium	15	F1	15.8	38.2	F1	mg/Kg	☼	145	80 - 120	3	20
Barium	64	F1	158	264	F1	mg/Kg	☼	126	80 - 120	5	20

Lab Sample ID: 580-46454-1 DU
Matrix: Solid
Analysis Batch: 176984

Client Sample ID: MSB-SW-11-111914
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	5.7		5.23		mg/Kg	☼	8	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	15	F1	13.5		mg/Kg	☼	12	20
Barium	64	F1	58.3		mg/Kg	☼	10	20

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-46454-1 DU
 Matrix: Solid
 Analysis Batch: 176770

Client Sample ID: MSB-SW-11-111914
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU	DU	Unit	D	RPD	Limit
			Result	Qualifier				
Percent Solids	93		91		%		1	20
Percent Moisture	7.5		8.5		%		13	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-11-111914

Lab Sample ID: 580-46454-1

Date Collected: 11/19/14 11:20

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 15:38	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 16:55	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-12-111914

Lab Sample ID: 580-46454-2

Date Collected: 11/19/14 12:15

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 14:44	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:19	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-BS-6-111914

Lab Sample ID: 580-46454-3

Date Collected: 11/19/14 12:25

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 15:16	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:23	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-13-111914

Lab Sample ID: 580-46454-4

Date Collected: 11/19/14 12:30

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 15:53	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:26	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-14-111914

Lab Sample ID: 580-46454-5

Date Collected: 11/19/14 14:15

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 16:11	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:30	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-BS-7-111914

Lab Sample ID: 580-46454-6

Date Collected: 11/19/14 14:20

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 16:29	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:33	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-15-111914

Lab Sample ID: 580-46454-7

Date Collected: 11/19/14 14:25

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 16:47	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:36	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-BS-8-111914

Lab Sample ID: 580-46454-8

Date Collected: 11/19/14 15:30

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 17:23	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:40	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-16-112014

Lab Sample ID: 580-46454-9

Date Collected: 11/20/14 08:05

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			176555	11/24/14 11:10	TAA	TAL SEA
Total/NA	Cleanup	3630C			176677	11/25/14 09:54	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176646	11/25/14 17:41	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:43	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-17-112014

Lab Sample ID: 580-46454-10

Date Collected: 11/20/14 08:10

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 16:16	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:47	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-BS-9-112014

Lab Sample ID: 580-46454-11

Date Collected: 11/20/14 09:35

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 16:35	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 17:50	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-18-112014

Lab Sample ID: 580-46454-12

Date Collected: 11/20/14 10:45

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 16:53	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 18:01	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-SW-19-112014

Lab Sample ID: 580-46454-13

Date Collected: 11/20/14 10:50

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 17:12	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 18:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-BS-10-112014

Lab Sample ID: 580-46454-14

Date Collected: 11/20/14 12:20

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 17:31	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 18:08	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-20-112014

Lab Sample ID: 580-46454-15

Date Collected: 11/20/14 13:45

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 18:08	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 18:11	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-21-112014

Lab Sample ID: 580-46454-16

Date Collected: 11/20/14 13:50

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 18:27	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 18:15	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Client Sample ID: MSB-BS-11-112014

Lab Sample ID: 580-46454-17

Date Collected: 11/20/14 14:05

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 18:45	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	176984	11/26/14 18:18	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Client Sample ID: MSB-SW-22-112014

Lab Sample ID: 580-46454-18

Date Collected: 11/20/14 14:10

Matrix: Solid

Date Received: 11/21/14 09:30

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			177032	12/01/14 12:18	ALL	TAL SEA
Total/NA	Cleanup	3630C			177058	12/01/14 15:32	ALL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	177101	12/02/14 19:04	JJP	TAL SEA
Total/NA	Prep	3050B			176711	11/25/14 12:14	PAB	TAL SEA
Total/NA	Analysis	6020		10	177245	12/03/14 11:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	176770	11/25/14 17:12	RBL	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-16
California	State Program	9	2901	01-31-17
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
US Fish & Wildlife	Federal		LE192332-0	02-28-16
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-16

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Excavation

TestAmerica Job ID: 580-46454-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46454-1	MSB-SW-11-111914	Solid	11/19/14 11:20	11/21/14 09:30
580-46454-2	MSB-SW-12-111914	Solid	11/19/14 12:15	11/21/14 09:30
580-46454-3	MSB-BS-6-111914	Solid	11/19/14 12:25	11/21/14 09:30
580-46454-4	MSB-SW-13-111914	Solid	11/19/14 12:30	11/21/14 09:30
580-46454-5	MSB-SW-14-111914	Solid	11/19/14 14:15	11/21/14 09:30
580-46454-6	MSB-BS-7-111914	Solid	11/19/14 14:20	11/21/14 09:30
580-46454-7	MSB-SW-15-111914	Solid	11/19/14 14:25	11/21/14 09:30
580-46454-8	MSB-BS-8-111914	Solid	11/19/14 15:30	11/21/14 09:30
580-46454-9	MSB-SW-16-112014	Solid	11/20/14 08:05	11/21/14 09:30
580-46454-10	MSB-SW-17-112014	Solid	11/20/14 08:10	11/21/14 09:30
580-46454-11	MSB-BS-9-112014	Solid	11/20/14 09:35	11/21/14 09:30
580-46454-12	MSB-SW-18-112014	Solid	11/20/14 10:45	11/21/14 09:30
580-46454-13	MSB-SW-19-112014	Solid	11/20/14 10:50	11/21/14 09:30
580-46454-14	MSB-BS-10-112014	Solid	11/20/14 12:20	11/21/14 09:30
580-46454-15	MSB-SW-20-112014	Solid	11/20/14 13:45	11/21/14 09:30
580-46454-16	MSB-SW-21-112014	Solid	11/20/14 13:50	11/21/14 09:30
580-46454-17	MSB-BS-11-112014	Solid	11/20/14 14:05	11/21/14 09:30
580-46454-18	MSB-SW-22-112014	Solid	11/20/14 14:10	11/21/14 09:30



TestAmerica

580-46454 Chain of Custody

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

509-924-9200 FAX 924-9290
 503-906-9200 FAX 906-9210
 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

TURNAROUND REQUEST

In Business Days *

Organic & Inorganic Analyses: 10, 7, 5, 4, 3, 2, 1, <1

Petroleum Hydrocarbon Analyses: 5, 4, 3, 2, 1, <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CLIENT:	INVOICE TO:	REPORT TO:	ADDRESS:	PHONE:	PROJECT NAME:	PROJECT NUMBER:	SAMPLED BY:	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	DATE:	DATE:	RECEIVED BY:	PRINT NAME:	FIRM:	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
BNSF		Laural Himes / Kennedy Senks	32001 32nd Ave Ste 100 Federal Way, WA 98001	253-835-6400 FAX:	Perimeter Excavation	149610*06	Alexander Leher			11-19-14	11-20-14	Alexander Leher	Alexander Leher	TestAmerica	S	2		

Requested Analyses: D, Silica, Metals *
 Preservative:
 Cooler/TB Dig cor 0.3 unc 1.0
 Cooler Disc 1/4 P/w @ Lab
 Wet Packs Packing BUBBLE
 W/CS FIDEX PD

Additional Remarks: * Metals: Arsenic, Cadmium, Total Chromium

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

509-924-9200 FAX 924-9290
 503-906-9200 FAX 906-9210
 907-563-9200 FAX 563-9210

4/20/15

CHAIN OF CUSTODY REPORT

Work Order #:

TURNAROUND REQUEST

In Business Days *

Organic & Inorganic Analyses

10 7 5 4 3 2 1 <1
 STD. Petroleum Hydrocarbon Analyses

5 4 3 2 1 <1
 STD. OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CLIENT: BNSF		INVOICE TO:		REPORT TO: Laura Hines / Kennedybenks	
ADDRESS: 38001 32nd Ave Ste 100 Federal Way, WA 98001		PRESERVATIVE		ADDRESS: 38001 32nd Ave Ste 100 Federal Way, WA 98001	
PHONE: 252-835-6400 FAX:		P.O. NUMBER:		PROJECT NAME: Parkwater MSB Excavation	
PROJECT NUMBER: 1496110		REQUESTED ANALYSES		PROJECT NUMBER: 1496110	
SAMPLED BY: Alexander Lesher		MATRIX (W, S, O)		S <input type="checkbox"/> L <input type="checkbox"/> S <input type="checkbox"/> L <input type="checkbox"/> S <input type="checkbox"/> L <input type="checkbox"/>	
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	# OF CONT.	LOCATION/ COMMENTS	TA	TA
1. MSB-SU-16-112014	11-20-14 0805	2		2	
2. MSB-SU-17-112014	0810	2		2	
3. MSB-B5-9-112014	0935	1		1	
4. MSB-SU-18-112014	1045	1		1	
5. MSB-SU-19-112014	1050	1		1	
6. MSB-B5-10-112014	1220	1		1	
7. MSB-SU-20-112014	1345	1		1	
8. MSB-SU-21-112014	135	1		1	
9. MSB-B5-11-112014	12014	1		1	
10. MSB-SU-22-112014	12014	1		1	

RECEIVED BY: **[Signature]** DATE: **11-20-14** TIME: **15:10** FIRM: **Kennedybenks**

RECEIVED BY: **[Signature]** DATE: **11-20-14** TIME: **16:30** FIRM: **TA SEA**

ADDITIONAL REMARKS: ***Metals: Cd, Total Cr, As**



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

TURNAROUND REQUEST

In Business Days*

Organic & Inorganic Analyses

10 STD.	7	5	4	3	2	1	<1
Petroleum Hydrocarbon Analyses	5 STD.	4	3	2	1	<1	

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges

CLIENT	INVOICE TO:	PRESERVATIVE	REQUESTED ANALYSES										MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID		
			1	2	3	4	5	6	7	8	9	10						
CLIENT: BAUSE REPORT TO: Laura Hines ADDRESS: 3201 39th Ave Federal Way, WA 98001 PHONE: 855 835 6400 FAX: PROJECT NAME: Parkwater Exc MSB PROJECT NUMBER: 496110 SAMPLED BY: AWL	P.O. NUMBER: PRESERVATIVE:																	
17. MSB-BS-11-12014 11-20-14 1405 18. MSB-SW-22-12014 11-20-14 1410																	S S	
RELEASED BY: Alexander Leshner FIRM: Kennedy Jenks DATE: 11-20-14 TIME: 16:35 RECEIVED BY: At Staples FIRM: TA SP DATE: 11-20-14 TIME: 16:35 ADDITIONAL REMARKS:	RECEIVED BY: At Staples FIRM: TA SP DATE: 11-20-14 TIME: 16:35 RECEIVED BY: Michelle Arcevo FIRM: TA SEA DATE: 11-22-14 TIME: 08:50																	

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-46454-1

Login Number: 46454

List Source: TestAmerica Seattle

List Number: 1

Creator: Tyson, Benjamin C

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.	False	Refer to Job Narrative for details.
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.	N/A	
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Western Fruit Express

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40386-1
Client Project/Site: Parkwater

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/7/2013 4:44:18 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Job ID: 580-40386-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 9/20/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 6.0° C.

Except:

The following samples was activated for Metals analysis by the client on 9-22-2013.DS-RB1-091813 (580-40386-7). This analysis was not originally requested on the chain-of-custody (COC).

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146331, from preparation batch 146344 the method blank contained #2 Diesel Fuel (C10-C24) above the reporting limit (RL). None of the samples associated with this method blank contained the target compound greater than the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Client Sample ID: DS-RB1-091813

Lab Sample ID: 580-40386-7

Date Collected: 09/18/13 16:40

Matrix: Water

Date Received: 09/20/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/02/13 09:10	10/02/13 18:45	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/02/13 09:10	10/02/13 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	59		50 - 150				10/02/13 09:10	10/02/13 18:45	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/01/13 18:36	10/02/13 13:34	5
Barium	ND		0.0060		mg/L		10/01/13 18:36	10/02/13 13:34	5
Cadmium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:34	5
Chromium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:34	5
Lead	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:34	5

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Client Sample ID: WFE-RB1-091913

Lab Sample ID: 580-40386-24

Date Collected: 09/19/13 15:24

Matrix: Water

Date Received: 09/20/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/02/13 14:25	10/04/13 22:51	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/02/13 14:25	10/04/13 22:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	91		50 - 150				10/02/13 14:25	10/04/13 22:51	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/01/13 18:36	10/02/13 13:38	5
Barium	ND		0.0060		mg/L		10/01/13 18:36	10/02/13 13:38	5
Cadmium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:38	5
Chromium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:38	5
Lead	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:38	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146344/1-A

Matrix: Water

Analysis Batch: 146331

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.149		0.13		mg/L		10/02/13 09:10	10/02/13 17:51	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/02/13 09:10	10/02/13 17:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150	10/02/13 09:10	10/02/13 17:51	1

Lab Sample ID: LCS 580-146344/2-A

Matrix: Water

Analysis Batch: 146331

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146344

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.68		mg/L		92	70 - 140
Motor Oil (>C24-C36)	4.00	4.03		mg/L		101	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	96		50 - 150

Lab Sample ID: LCSD 580-146344/3-A

Matrix: Water

Analysis Batch: 146331

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 146344

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.81		mg/L		95	70 - 140	3	27
Motor Oil (>C24-C36)	4.00	4.06		mg/L		101	66 - 125	1	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	96		50 - 150

Lab Sample ID: MB 580-146396/1-A

Matrix: Water

Analysis Batch: 146590

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/02/13 14:25	10/04/13 21:57	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/02/13 14:25	10/04/13 21:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150	10/02/13 14:25	10/04/13 21:57	1

Lab Sample ID: LCS 580-146396/2-A

Matrix: Water

Analysis Batch: 146590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	4.20		mg/L		105	70 - 140
Motor Oil (>C24-C36)	4.00	4.40		mg/L		110	66 - 125

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-146396/2-A

Matrix: Water

Analysis Batch: 146590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146396

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	107		50 - 150

Lab Sample ID: LCSD 580-146396/3-A

Matrix: Water

Analysis Batch: 146590

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 146396

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	4.00	4.19		mg/L		105	70 - 140	0	27	
Motor Oil (>C24-C36)	4.00	4.37		mg/L		109	66 - 125	1	27	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	106		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146311/20-A

Matrix: Water

Analysis Batch: 146390

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 146311

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0050		mg/L		10/01/13 18:36	10/02/13 11:20	5
Barium	ND		0.0060		mg/L		10/01/13 18:36	10/02/13 11:20	5
Cadmium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 11:20	5
Chromium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 11:20	5
Lead	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 11:20	5

Lab Sample ID: LCS 580-146311/21-A

Matrix: Water

Analysis Batch: 146390

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 146311

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Arsenic	4.00	4.00		mg/L		100	80 - 120	
Barium	4.00	4.05		mg/L		101	80 - 120	
Cadmium	0.100	0.0879		mg/L		88	80 - 120	
Chromium	0.400	0.413		mg/L		103	80 - 120	
Lead	1.00	1.01		mg/L		101	80 - 120	

Lab Sample ID: LCSD 580-146311/22-A

Matrix: Water

Analysis Batch: 146390

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 146311

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Arsenic	4.00	4.02		mg/L		101	80 - 120	0	20	
Barium	4.00	4.06		mg/L		101	80 - 120	0	20	
Cadmium	0.100	0.0927		mg/L		93	80 - 120	5	20	
Chromium	0.400	0.415		mg/L		104	80 - 120	0	20	
Lead	1.00	1.01		mg/L		101	80 - 120	0	20	

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Client Sample ID: DS-RB1-091813

Lab Sample ID: 580-40386-7

Date Collected: 09/18/13 16:40

Matrix: Water

Date Received: 09/20/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 18:45	JL1	TAL SEA
Total Recoverable	Prep	3005A			146311	10/01/13 18:36	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146390	10/02/13 13:34	FCW	TAL SEA

Client Sample ID: WFE-RB1-091913

Lab Sample ID: 580-40386-24

Date Collected: 09/19/13 15:24

Matrix: Water

Date Received: 09/20/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146396	10/02/13 14:25	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146590	10/04/13 22:51	JL1	TAL SEA
Total Recoverable	Prep	3005A			146311	10/01/13 18:36	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146390	10/02/13 13:38	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40386-7	DS-RB1-091813	Water	09/18/13 16:40	09/20/13 09:30
580-40386-24	WFE-RB1-091913	Water	09/19/13 15:24	09/20/13 09:30

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CHAIN OF CUSTODY
BNSF PROJECT INFORMATION

Laboratory: **WASHINGTON** Project Manager: **HOWARD YOUNG**
 Address: **SROKANE** Project City: **SROKANE** Shipment Method:
 City/State/Zip: **WASHINGTON** Project State of Origin: **WASHINGTON** Tracking Number:
 Consultant Information: **CONSULTANT INFORMATION** Project Number:

BNSF Project Number: **1396110.04** BNSF Work Order No.: **TD101-N10**
 BNSF Project Name: **YARKWATER** Company: **KENNEDY/LENKS CONSULTANTS** Project Manager: **HOWARD YOUNG**
 BNSF Contact: **BRUCE SHERARD** Address: **32001 32ND AVENUE SUITE 100** Email: **howardyoung@kennedylenks.com**
 City/State/Zip: **FEDERALWAY WA 98007** Phone: **753-835-6400** Fax: **253-993-3454**

TURNAROUND TIME
 1-2 day Rush
 3-5 day Rush
 5- to 8-day Rush
 Standard 10-Day
 Other: **SEE COMMENT**

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables? **1/1 Custom EDD**
 EDD Req. Format?

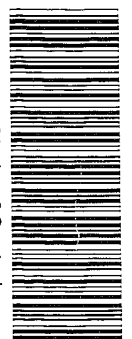
SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	As, Cd, Ba, Pb, Total Cr by EPA 1620 As, Cr, B, P, V, DR NITR-H-DR DIESEL OIL	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler							
1 DS-SW1-091813	1	9/18/13	1009	HN	N	G	S	X		1-DAY	1
2 DS-SW2-091813	1	9/18/13	1012	HY				X		1-DAY	2
3 DS-SW3-091813	1	9/18/13	1015	HY				X		1-DAY	3
4 DS-SW4-091813	1	9/18/13	1018	HY				X		1-DAY	4
5 DS-BS1-091813	1	9/18/13	1025	HY				X		1-DAY	5
6 DS-BS101-091813	1	9/18/13	1005	HY				X		1-DAY	6
7 DS-RB1-091813	3	9/18/13	1040	HY	N	G	W	X		STANDARD TAT	7
8 WFE-BS1-091913	1	9/19/13	0959	DL			S	X		2-DAY	8
9 WFE-SW1-091913	1	9/19/13	1003	DR				X		2-DAY	9
10 WFE-BS2-091913	1	9/19/13	1007	DL				X		2-DAY	10
11 WFE-BS3-091913	1	9/19/13	1010	DL				X		2-DAY	11
12 WFE-SW3-091913	1	9/19/13	1042	DL				X		2-DAY	12
13 WFE-SW2-091913	1	9/19/13	1048	DL				X		2-DAY	13
14 WFE-BS4-091913	1	9/19/13	1126	DR				X		2-DAY	14
15 WFE-BS5-091913	1	9/19/13	1134	DR				X		2-DAY	15

Reinquisitioned By: **Danner** Date/Time: **9/19/13 1601** Received By: **Mat Suda**
 Requisitioned By: **1/1** Date/Time: **9/19/13 1605** Received By: **1/1**

Requisitioned By: **1/1** Date/Time: **9/19/13 16:20** Received By: **1/1**
 Received by Laboratory: **1/1** Date/Time: **9/19/13 16:20** Lab Remarks: **1/1**

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
 DUPLICATE - CONSULTANT
 LAB WORK ORDER: **40386**
 SHIPMENT INFORMATION



580-40386 Chain of Custody



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 13916110.04
 BNSF Project Name: RUCKWATER
 BNSF Work Order No.: 11011 N10

Project State of Origin: WASHINGTON
 City/State/Zip: SPOKANE
 Company: KENNEDY/JENKINS CONSULTANTS
 Address: 3201 32ND AVENUE SUITE 100
 City/State/Zip: FEDERAL WAY WA 98001
 Project Manager: HOWARD YOUNG
 Phone: 253-835-4401
 Fax: 253-952-3495
 Email: howard.young@kjaanalyt.com

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other: SEE COMMENTS

TURNAROUND TIME
 1-2 day Rush
 2-4 day Rush
 5-10 day Rush
 Standard 10-Day
 3-day Rush
 Other: SEE COMMENTS

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler					
1. WFE-BS105-091913	1	9/19/13	1130	DR	N	G S	AsCd, Ba, Pb, Total Cr by EPA 6020 NUTPH-OX DIESEL, OIL	2-04X	16
2. WFE-BS10-091913	1	9/19/13	1224					2-04X	17
3. WFE-SW4-091913	1	9/19/13	1230					2-04X	18
4. WFE-SW5-091913	1	9/19/13	1237					2-04X	19
5. WFE-SW6-091913	1	9/19/13	1454					2-04X	20
6. WFE-SW7-091913	1	9/19/13	1457					2-04X	21
7. WFE-BS7-091913	1	9/19/13	1447					2-04X	22
8. WFE-BS8-091913	1	9/19/13	1450					2-04X	23
9. WFE-RB1-091913	1	9/19/13	15:29					STANDARD TAT	24

11. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc h/bw @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:01
 Received By: Matt Suda
 Date Time: 9/19/13 16:05

12. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc h/bw @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:20
 Received By: Matt Suda
 Date Time: 9/19/13 16:25

13. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc h/bw @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:20
 Received By: Matt Suda
 Date Time: 9/19/13 16:25

14. Comments and Special Analytical Requirements:
 89C

15. Lab Custody Intact? Yes No

Login Container Summary Report

Unloaded onto cart in walk in.

Temperature readings: 4.6 °C @ 13:10, put away @ 13:15

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
DS-RB1-091813	580-40386-A-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-B-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-C-7	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
WFE-RB1-091913	580-40386-A-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-B-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-C-24	Plastic 125mL - Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40386-1

Login Number: 40386

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40386-2
Client Project/Site: Parkwater

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
9/24/2013 2:34:53 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com



LINKS

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www.testamericainc.com

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

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

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- 10
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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Job ID: 580-40386-2

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 9/20/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 6.0° C.

Except:

The following samples was activated for Metals analysis by the client on 9-22-2013.DS-RB1-091813 (580-40386-7). This analysis was not originally requested on the chain-of-custody (COC).

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS1-091913

Lab Sample ID: 580-40386-8

Date Collected: 09/19/13 09:59

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 82.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		0.56		mg/Kg	☼	09/20/13 13:49	09/23/13 10:42	10
Barium	250		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:42	10
Cadmium	1.7		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:42	10
Chromium	14		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:42	10
Lead	560		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10		%			09/20/13 17:55	1
Percent Moisture	17		0.10		%			09/20/13 17:55	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW1-091913

Lab Sample ID: 580-40386-9

Date Collected: 09/19/13 10:03

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 88.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.41		mg/Kg	☼	09/20/13 13:49	09/23/13 10:46	10
Barium	270		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:46	10
Cadmium	2.7		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:46	10
Chromium	14		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:46	10
Lead	630		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:46	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/20/13 17:55	1
Percent Moisture	11		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS2-091913

Lab Sample ID: 580-40386-10

Date Collected: 09/19/13 10:07

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 87.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.54		mg/Kg	☼	09/20/13 13:49	09/23/13 10:50	10
Barium	230		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:50	10
Cadmium	1.6		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:50	10
Chromium	15		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:50	10
Lead	3700		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 10:50	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/20/13 17:55	1
Percent Moisture	12		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS3-091913

Lab Sample ID: 580-40386-11

Date Collected: 09/19/13 10:10

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 89.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.1		0.40		mg/Kg	☼	09/20/13 13:49	09/23/13 10:54	10
Barium	220		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:54	10
Cadmium	0.71		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:54	10
Chromium	18		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:54	10
Lead	360		0.16		mg/Kg	☼	09/20/13 13:49	09/23/13 10:54	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/20/13 17:55	1
Percent Moisture	10		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW3-091913

Lab Sample ID: 580-40386-12

Date Collected: 09/19/13 10:42

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 73.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	43		0.61		mg/Kg	☼	09/20/13 13:49	09/23/13 10:58	10
Barium	1000		0.24		mg/Kg	☼	09/20/13 13:49	09/23/13 10:58	10
Cadmium	8.2		0.24		mg/Kg	☼	09/20/13 13:49	09/23/13 10:58	10
Chromium	35		0.24		mg/Kg	☼	09/20/13 13:49	09/23/13 10:58	10
Lead	12000		24		mg/Kg	☼	09/20/13 13:49	09/23/13 11:39	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/20/13 17:55	1
Percent Moisture	27		0.10		%			09/20/13 17:55	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW2-091913

Lab Sample ID: 580-40386-13

Date Collected: 09/19/13 10:48

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 83.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	17		0.53		mg/Kg	☼	09/20/13 13:49	09/23/13 11:11	10
Barium	570		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:11	10
Cadmium	1.4		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:11	10
Chromium	20		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:11	10
Lead	380		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:11	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/20/13 17:55	1
Percent Moisture	16		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS4-091913

Lab Sample ID: 580-40386-14

Date Collected: 09/19/13 11:26

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 88.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		0.44		mg/Kg	☼	09/20/13 13:49	09/23/13 11:15	10
Barium	860		0.18		mg/Kg	☼	09/20/13 13:49	09/23/13 11:15	10
Cadmium	5.3		0.18		mg/Kg	☼	09/20/13 13:49	09/23/13 11:15	10
Chromium	19		0.18		mg/Kg	☼	09/20/13 13:49	09/23/13 11:15	10
Lead	2000		0.18		mg/Kg	☼	09/20/13 13:49	09/23/13 11:15	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/20/13 17:55	1
Percent Moisture	12		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS5-091913

Lab Sample ID: 580-40386-15

Date Collected: 09/19/13 11:34

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 87.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.50		mg/Kg	☼	09/20/13 13:49	09/23/13 11:19	10
Barium	460		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 11:19	10
Cadmium	1.3		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 11:19	10
Chromium	12		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 11:19	10
Lead	1600		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 11:19	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/20/13 17:55	1
Percent Moisture	13		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS105-091913

Lab Sample ID: 580-40386-16

Date Collected: 09/19/13 11:36

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 85.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.54		mg/Kg	☼	09/20/13 13:49	09/23/13 11:23	10
Barium	210		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:23	10
Cadmium	0.32		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:23	10
Chromium	12		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:23	10
Lead	340		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:23	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/20/13 17:55	1
Percent Moisture	14		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS6-091913

Lab Sample ID: 580-40386-17

Date Collected: 09/19/13 12:24

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 86.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.6		0.48		mg/Kg	☼	09/20/13 13:49	09/23/13 11:27	10
Barium	220		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 11:27	10
Cadmium	0.34		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 11:27	10
Chromium	15		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 11:27	10
Lead	280		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 11:27	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/20/13 17:55	1
Percent Moisture	14		0.10		%			09/20/13 17:55	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW4-091913

Lab Sample ID: 580-40386-18

Date Collected: 09/19/13 12:30

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 77.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.56		mg/Kg	☼	09/20/13 13:49	09/23/13 11:31	10
Barium	610		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:31	10
Cadmium	69		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:31	10
Chromium	21		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:31	10
Lead	3600		0.22		mg/Kg	☼	09/20/13 13:49	09/23/13 11:31	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78		0.10		%			09/20/13 17:55	1
Percent Moisture	22		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW5-091913

Lab Sample ID: 580-40386-19

Date Collected: 09/19/13 13:37

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 88.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	29		0.53		mg/Kg	☼	09/20/13 13:49	09/23/13 11:35	10
Barium	370		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:35	10
Cadmium	1.9		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:35	10
Chromium	20		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:35	10
Lead	4800		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 11:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/20/13 17:55	1
Percent Moisture	12		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW6-091913

Lab Sample ID: 580-40386-20

Date Collected: 09/19/13 14:54

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 81.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	250		0.50		mg/Kg	✱	09/20/13 16:27	09/23/13 21:22	10
Barium	830		0.20		mg/Kg	✱	09/20/13 16:27	09/23/13 21:22	10
Cadmium	17		0.20		mg/Kg	✱	09/20/13 16:27	09/23/13 21:22	10
Chromium	21		0.20		mg/Kg	✱	09/20/13 16:27	09/23/13 21:22	10
Lead	33000		20		mg/Kg	✱	09/20/13 16:27	09/24/13 07:00	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10		%			09/20/13 17:55	1
Percent Moisture	19		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW7-091913

Lab Sample ID: 580-40386-21

Date Collected: 09/19/13 14:57

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 85.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20		0.53		mg/Kg	✱	09/20/13 16:27	09/23/13 21:27	10
Barium	430		0.21		mg/Kg	✱	09/20/13 16:27	09/23/13 21:27	10
Cadmium	1.8		0.21		mg/Kg	✱	09/20/13 16:27	09/23/13 21:27	10
Chromium	28		0.21		mg/Kg	✱	09/20/13 16:27	09/23/13 21:27	10
Lead	2600		0.21		mg/Kg	✱	09/20/13 16:27	09/23/13 21:27	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			09/20/13 18:21	1
Percent Moisture	15		0.10		%			09/20/13 18:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS7-091913

Lab Sample ID: 580-40386-22

Date Collected: 09/19/13 14:47

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 84.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.6		0.41		mg/Kg	☼	09/20/13 16:27	09/23/13 21:31	10
Barium	170		0.16		mg/Kg	☼	09/20/13 16:27	09/23/13 21:31	10
Cadmium	0.35		0.16		mg/Kg	☼	09/20/13 16:27	09/23/13 21:31	10
Chromium	14		0.16		mg/Kg	☼	09/20/13 16:27	09/23/13 21:31	10
Lead	96		0.16		mg/Kg	☼	09/20/13 16:27	09/23/13 21:31	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/20/13 18:21	1
Percent Moisture	16		0.10		%			09/20/13 18:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS8-091913

Lab Sample ID: 580-40386-23

Date Collected: 09/19/13 14:50

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 89.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.49		mg/Kg	☼	09/20/13 16:27	09/23/13 21:35	10
Barium	270		0.19		mg/Kg	☼	09/20/13 16:27	09/23/13 21:35	10
Cadmium	1.4		0.19		mg/Kg	☼	09/20/13 16:27	09/23/13 21:35	10
Chromium	16		0.19		mg/Kg	☼	09/20/13 16:27	09/23/13 21:35	10
Lead	1300		0.19		mg/Kg	☼	09/20/13 16:27	09/23/13 21:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/20/13 18:21	1
Percent Moisture	11		0.10		%			09/20/13 18:21	1



QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-145480/22-A
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145480

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Barium	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Cadmium	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Chromium	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Lead	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10

Lab Sample ID: LCS 580-145480/23-A
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145480

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	200		mg/Kg		100	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.67		mg/Kg		93	80 - 120
Chromium	20.0	19.3		mg/Kg		97	80 - 120
Lead	50.0	48.7		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-145480/24-A
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145480

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	199		mg/Kg		99	80 - 120	1	20
Barium	200	194		mg/Kg		97	80 - 120	0	20
Cadmium	5.00	4.53		mg/Kg		91	80 - 120	3	20
Chromium	20.0	19.3		mg/Kg		96	80 - 120	0	20
Lead	50.0	48.2		mg/Kg		96	80 - 120	1	20

Lab Sample ID: MB 580-145496/17-A
Matrix: Solid
Analysis Batch: 145639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/20/13 16:27	09/23/13 15:41	10
Barium	ND		0.20		mg/Kg		09/20/13 16:27	09/23/13 15:41	10
Cadmium	ND		0.20		mg/Kg		09/20/13 16:27	09/23/13 15:41	10
Chromium	ND		0.20		mg/Kg		09/20/13 16:27	09/23/13 15:41	10
Lead	ND		0.20		mg/Kg		09/20/13 16:27	09/23/13 15:41	10

Lab Sample ID: LCS 580-145496/18-A
Matrix: Solid
Analysis Batch: 145639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145496

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	197		mg/Kg		99	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Cadmium	5.00	4.61		mg/Kg		92	80 - 120
Chromium	20.0	19.3		mg/Kg		96	80 - 120
Lead	50.0	47.9		mg/Kg		96	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-145496/19-A

Matrix: Solid

Analysis Batch: 145639

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 145496

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Arsenic	200	196		mg/Kg		98	80 - 120	1	20	
Barium	200	189		mg/Kg		94	80 - 120	1	20	
Cadmium	5.00	4.43		mg/Kg		89	80 - 120	4	20	
Chromium	20.0	19.4		mg/Kg		97	80 - 120	1	20	
Lead	50.0	47.8		mg/Kg		96	80 - 120	0	20	

Lab Sample ID: LCSSRM 580-145496/20-A

Matrix: Solid

Analysis Batch: 145639

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145496

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Arsenic	236	253		mg/Kg		107.2	71.3 - 129.	1		
Barium	251	255		mg/Kg		101.5	73.8 - 126.	2		
Cadmium	190	194		mg/Kg		102.2	73.3 - 126.	7		
Chromium	128	130		mg/Kg		101.9	65.5 - 129.	7		
Lead	103	104		mg/Kg		101.2	70.9 - 128.	2		

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS1-091913

Lab Sample ID: 580-40386-8

Date Collected: 09/19/13 09:59

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:42	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-SW1-091913

Lab Sample ID: 580-40386-9

Date Collected: 09/19/13 10:03

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:46	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-BS2-091913

Lab Sample ID: 580-40386-10

Date Collected: 09/19/13 10:07

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:50	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-BS3-091913

Lab Sample ID: 580-40386-11

Date Collected: 09/19/13 10:10

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:54	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-SW3-091913

Lab Sample ID: 580-40386-12

Date Collected: 09/19/13 10:42

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	145580	09/23/13 10:58	FCW	TAL SEA
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		1000	145580	09/23/13 11:39	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW2-091913

Lab Sample ID: 580-40386-13

Date Collected: 09/19/13 10:48

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:11	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-BS4-091913

Lab Sample ID: 580-40386-14

Date Collected: 09/19/13 11:26

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:15	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-BS5-091913

Lab Sample ID: 580-40386-15

Date Collected: 09/19/13 11:34

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 87.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:19	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-BS105-091913

Lab Sample ID: 580-40386-16

Date Collected: 09/19/13 11:36

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:23	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-BS6-091913

Lab Sample ID: 580-40386-17

Date Collected: 09/19/13 12:24

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-SW4-091913

Lab Sample ID: 580-40386-18

Date Collected: 09/19/13 12:30

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:31	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-SW5-091913

Lab Sample ID: 580-40386-19

Date Collected: 09/19/13 13:37

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 11:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-SW6-091913

Lab Sample ID: 580-40386-20

Date Collected: 09/19/13 14:54

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145496	09/20/13 16:27	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 21:22	FCW	TAL SEA
Total/NA	Analysis	6020		1000	145644	09/24/13 07:00	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: WFE-SW7-091913

Lab Sample ID: 580-40386-21

Date Collected: 09/19/13 14:57

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145496	09/20/13 16:27	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 21:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 18:21	PAB	TAL SEA

Client Sample ID: WFE-BS7-091913

Lab Sample ID: 580-40386-22

Date Collected: 09/19/13 14:47

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145496	09/20/13 16:27	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 21:31	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 18:21	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Client Sample ID: WFE-BS8-091913

Lab Sample ID: 580-40386-23

Date Collected: 09/19/13 14:50

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145496	09/20/13 16:27	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 21:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 18:21	PAB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40386-8	WFE-BS1-091913	Solid	09/19/13 09:59	09/20/13 09:30
580-40386-9	WFE-SW1-091913	Solid	09/19/13 10:03	09/20/13 09:30
580-40386-10	WFE-BS2-091913	Solid	09/19/13 10:07	09/20/13 09:30
580-40386-11	WFE-BS3-091913	Solid	09/19/13 10:10	09/20/13 09:30
580-40386-12	WFE-SW3-091913	Solid	09/19/13 10:42	09/20/13 09:30
580-40386-13	WFE-SW2-091913	Solid	09/19/13 10:48	09/20/13 09:30
580-40386-14	WFE-BS4-091913	Solid	09/19/13 11:26	09/20/13 09:30
580-40386-15	WFE-BS5-091913	Solid	09/19/13 11:34	09/20/13 09:30
580-40386-16	WFE-BS105-091913	Solid	09/19/13 11:36	09/20/13 09:30
580-40386-17	WFE-BS6-091913	Solid	09/19/13 12:24	09/20/13 09:30
580-40386-18	WFE-SW4-091913	Solid	09/19/13 12:30	09/20/13 09:30
580-40386-19	WFE-SW5-091913	Solid	09/19/13 13:37	09/20/13 09:30
580-40386-20	WFE-SW6-091913	Solid	09/19/13 14:54	09/20/13 09:30
580-40386-21	WFE-SW7-091913	Solid	09/19/13 14:57	09/20/13 09:30
580-40386-22	WFE-BS7-091913	Solid	09/19/13 14:47	09/20/13 09:30
580-40386-23	WFE-BS8-091913	Solid	09/19/13 14:50	09/20/13 09:30



CHAIN OF CUSTODY

LABORATORY INFORMATION

Laboratory: **WASHINGTON**

Address: **SROKANE**

City/State/Zip: **TIPOI-NIO**

Project Manager: **HOWARD YOUNG**

Phone: **753-997-3454**

Shipping Method: **HOWARD YOUNG**

Tracking Number: **40386**

LAB WORK ORDER: 40386

SHIPMENT INFORMATION

BNSF PROJECT INFORMATION

BNSF Project Number: **1396110.04**

BNSF Project Name: **YARKWATER**

BNSF Work Order No.: **TIPOI-NIO**

Company: **KENNEDY/LENKS CONSULTANTS**

Address: **32001 32ND AVES SUITE 100**

City/State/Zip: **FEDERALWAY WA 98007**

Project Manager: **HOWARD YOUNG**

Phone: **753-835-6400**

Email: **howardyoung@kennedylenks.com**

Fax: **253-997-3454**

TURNAROUND TIME

1-2 day Rush

5- to 8-day Rush

Standard 10-Day

3-day Rush

Other: **SEE COMMENT**

DELIVERABLES

BNSF Standard (Level II)

Level III

Level IV

Other Deliverables? **1/1 Custom EDD**

EDD Req. Format?

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	As, Cd, Ba, Pb, Total Cr by EPA 1620	As, Cr, B, Pb, DR	NITR-H-DR	DIESEL OIL	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler										
1 DS-SW1-091813	1	9/18/13	1009	HN	N	G	S	X					1-DAY	1
2 DS-SW2-091813	1	9/18/13	1012	HY				X					1-DAY	2
3 DS-SW3-091813	1	9/18/13	1015	HY				X					1-DAY	3
4 DS-SW4-091813	1	9/18/13	1018	HY				X					1-DAY	4
5 DS-BS1-091813	1	9/18/13	1025	HY				X					1-DAY	5
6 DS-BS101-091813	1	9/18/13	1005	HY				X					1-DAY	6
7 DS-RB1-091813	3	9/18/13	1040	HY	N	G	W		X				STANDARD TAT	7
8 WFE-BS1-091913	1	9/19/13	0959	DL			S	X					2-DAY	8
9 WFE-SW1-091913	1	9/19/13	1003	DR				X					2-DAY	9
10 WFE-BS2-091913	1	9/19/13	1007	DL				X					2-DAY	10
11 WFE-BS3-091913	1	9/19/13	1010	DL				X					2-DAY	11
12 WFE-SW3-091913	1	9/19/13	1042	DL				X					2-DAY	12
13 WFE-SW2-091913	1	9/19/13	1048	DL				X					2-DAY	13
14 WFE-BS4-091913	1	9/19/13	1126	DR				X					2-DAY	14
15 WFE-BS5-091913	1	9/19/13	1134	DR				X					2-DAY	15

REINQUISHED BY: **DAVE R**

Date/Time: **9/19/13 1601**

Received By: **WAT SUDA**

Date/Time: **9/19/13 1605**

Comments and Special Analytical Requirements:

S-4C

REINQUISHED BY: **WAT SUDA**

Date/Time: **9/19/13 16:20**

Received By: **WAT SUDA**

Date/Time: **9/20/13 9:30**

Lab Custody/Inact? Yes No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

580-40386 Chain of Custody

(06/05)



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 13916110.04
 Project State of Origin: WASHINGTON
 Project Site: SPOKANE
 Company: KENNEDY/JENKINS CONSULTANTS
 Address: 3201 32ND AVENUE SUITE 100
 City/State/Zip: FEDERAL WAY WA 98001
 Project Manager: HOWARD YOUNG
 Phone: 253-835-4401
 Fax: 253-952-3495
 Email: howard.young@kjaanalyt.com

BNSF Project Name: RAILWATER
 BNSF Work Order No.: 110101 N10
 Other Deliverables? YES (ATTACHED)
 BNSF Standard (Level II)
 BNSF Standard (Level III)
 BNSF Standard (Level IV)
 Other: SEE COMMENTS

TURNAROUND TIME: 45^Y 9/19/13
 DELIVERABLES: OTHER DELIVERABLES
 METHODS FOR ANALYSIS: ASCd, Ba, Pb, Total Cr by EPA 6020 NUTPH-OX DIESEL, OIL

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type Matrix	Comments	LAB USE
		Date	Time	Sampler				
1. WFE-BS105-091913	1	9/19/13	1130	DR	N	G S	X	16
2. WFE-BS10-091913	1	9/19/13	1224	1	1	1	X	17
3. WFE-SW4-091913	1	9/19/13	1230	1	1	1	X	18
4. WFE-SW5-091913	1	9/19/13	1237	1	1	1	X	19
5. WFE-SW6-091913	1	9/19/13	1454	1	1	1	X	20
6. WFE-SW7-091913	1	9/19/13	1457	1	1	1	X	21
7. WFE-BS7-091913	1	9/19/13	1447	1	1	1	X	22
8. WFE-BS8-091913	1	9/19/13	1450	DR	N	G S	X	23
9. WFE-RBI-091913	1	9/19/13	15:29	1	1	1	X	24

COOLER/TB DIGIR cor 2.5 unc
 Cooler Dsc h/bw @ Lab
 WetPacks Packing bubble
 9/19/13 16:01
 Received By: Matt Suda
 Date/Time: 9/19/13 16:01

COOLER/TB DIGIR cor 2.0 unc
 Cooler Dsc h/bw @ Lab
 WetPacks Packing bubble
 9/19/13 16:29
 Received By: Matt Suda
 Date/Time: 9/19/13 16:29

Comments and Special Analytical Requirements:
 89C

Login Container Summary Report

Unloaded onto cart in walk in.

Temperature readings: 4.6 °C @ 13:10, put away @ 13:15

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
DS-RB1-091813	580-40386-A-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-B-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-C-7	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
WFE-RB1-091913	580-40386-A-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-B-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-C-24	Plastic 125mL - Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40386-2

Login Number: 40386

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40420-2
Client Project/Site: BNSF Parkwater

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
9/24/2013 4:59:33 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Job ID: 580-40420-2

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 9/21/2013 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 4.7° C.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 145579 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-SW8-091913

Lab Sample ID: 580-40420-1

Date Collected: 09/19/13 17:47

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 84.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.59		mg/Kg	✱	09/23/13 13:19	09/23/13 21:51	10
Barium	440		0.23		mg/Kg	✱	09/23/13 13:19	09/23/13 21:51	10
Cadmium	28		0.23		mg/Kg	✱	09/23/13 13:19	09/23/13 21:51	10
Chromium	85		0.23		mg/Kg	✱	09/23/13 13:19	09/23/13 21:51	10
Lead	1400		0.23		mg/Kg	✱	09/23/13 13:19	09/23/13 21:51	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/23/13 16:33	1
Percent Moisture	16		0.10		%			09/23/13 16:33	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-SW9-091913

Lab Sample ID: 580-40420-2

Date Collected: 09/19/13 17:42

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 72.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	52		0.58		mg/Kg	☼	09/23/13 13:19	09/23/13 21:55	10
Barium	940		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 21:55	10
Cadmium	17		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 21:55	10
Chromium	36		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 21:55	10
Lead	11000		23		mg/Kg	☼	09/23/13 13:19	09/24/13 07:04	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/23/13 16:33	1
Percent Moisture	27		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-SW10-091913

Lab Sample ID: 580-40420-3

Date Collected: 09/19/13 17:53

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 74.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	37		0.55		mg/Kg	✱	09/23/13 13:19	09/23/13 21:59	10
Barium	850		0.22		mg/Kg	✱	09/23/13 13:19	09/23/13 21:59	10
Cadmium	7.6		0.22		mg/Kg	✱	09/23/13 13:19	09/23/13 21:59	10
Chromium	33		0.22		mg/Kg	✱	09/23/13 13:19	09/23/13 21:59	10
Lead	6000		22		mg/Kg	✱	09/23/13 13:19	09/24/13 07:08	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10		%			09/23/13 16:33	1
Percent Moisture	25		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS9-091913

Lab Sample ID: 580-40420-4

Date Collected: 09/19/13 08:15

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 86.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.9		0.50		mg/Kg	☼	09/23/13 13:19	09/23/13 22:24	10
Barium	170		0.20		mg/Kg	☼	09/23/13 13:19	09/23/13 22:24	10
Cadmium	ND		0.20		mg/Kg	☼	09/23/13 13:19	09/23/13 22:24	10
Chromium	18		0.20		mg/Kg	☼	09/23/13 13:19	09/23/13 22:24	10
Lead	25		0.20		mg/Kg	☼	09/23/13 13:19	09/23/13 22:24	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/23/13 16:33	1
Percent Moisture	14		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS10-091913

Lab Sample ID: 580-40420-5

Date Collected: 09/19/13 17:35

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 84.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.7		0.49		mg/Kg	☼	09/23/13 13:19	09/23/13 22:20	10
Barium	160		0.19		mg/Kg	☼	09/23/13 13:19	09/23/13 22:20	10
Cadmium	0.20		0.19		mg/Kg	☼	09/23/13 13:19	09/23/13 22:20	10
Chromium	15		0.19		mg/Kg	☼	09/23/13 13:19	09/23/13 22:20	10
Lead	67		0.19		mg/Kg	☼	09/23/13 13:19	09/23/13 22:20	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/23/13 16:33	1
Percent Moisture	16		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS11-091913

Lab Sample ID: 580-40420-6

Date Collected: 09/19/13 17:39

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 88.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		0.42		mg/Kg	☼	09/23/13 13:19	09/23/13 22:28	10
Barium	150		0.17		mg/Kg	☼	09/23/13 13:19	09/23/13 22:28	10
Cadmium	ND		0.17		mg/Kg	☼	09/23/13 13:19	09/23/13 22:28	10
Chromium	14		0.17		mg/Kg	☼	09/23/13 13:19	09/23/13 22:28	10
Lead	13		0.17		mg/Kg	☼	09/23/13 13:19	09/23/13 22:28	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/23/13 16:33	1
Percent Moisture	11		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS12-091913

Lab Sample ID: 580-40420-7

Date Collected: 09/19/13 17:50

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 72.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	32		0.59		mg/Kg	✱	09/23/13 13:19	09/23/13 22:03	10
Barium	930		0.24		mg/Kg	✱	09/23/13 13:19	09/23/13 22:03	10
Cadmium	7.1		0.24		mg/Kg	✱	09/23/13 13:19	09/23/13 22:03	10
Chromium	32		0.24		mg/Kg	✱	09/23/13 13:19	09/23/13 22:03	10
Lead	5900		24		mg/Kg	✱	09/23/13 13:19	09/24/13 07:13	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	72		0.10		%			09/23/13 16:33	1
Percent Moisture	28		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS112-091913

Lab Sample ID: 580-40420-8

Date Collected: 09/19/13 17:50

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 70.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	44		0.62		mg/Kg	✱	09/23/13 13:19	09/23/13 22:07	10
Barium	800		0.25		mg/Kg	✱	09/23/13 13:19	09/23/13 22:07	10
Cadmium	5.2		0.25		mg/Kg	✱	09/23/13 13:19	09/23/13 22:07	10
Chromium	33		0.25		mg/Kg	✱	09/23/13 13:19	09/23/13 22:07	10
Lead	6200		25		mg/Kg	✱	09/23/13 13:19	09/24/13 07:17	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	70		0.10		%			09/23/13 16:33	1
Percent Moisture	30		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS13-091913

Lab Sample ID: 580-40420-9

Date Collected: 09/19/13 18:15

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 75.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	52		0.58		mg/Kg	☼	09/23/13 13:19	09/23/13 22:11	10
Barium	500		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 22:11	10
Cadmium	11		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 22:11	10
Chromium	140		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 22:11	10
Lead	3100		0.23		mg/Kg	☼	09/23/13 13:19	09/23/13 22:11	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10		%			09/23/13 16:33	1
Percent Moisture	25		0.10		%			09/23/13 16:33	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS14-091913

Lab Sample ID: 580-40420-10

Date Collected: 09/19/13 18:20

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 74.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16		0.67		mg/Kg	☼	09/23/13 13:19	09/23/13 22:15	10
Barium	320		0.27		mg/Kg	☼	09/23/13 13:19	09/23/13 22:15	10
Cadmium	3.1		0.27		mg/Kg	☼	09/23/13 13:19	09/23/13 22:15	10
Chromium	19		0.27		mg/Kg	☼	09/23/13 13:19	09/23/13 22:15	10
Lead	1100		0.27		mg/Kg	☼	09/23/13 13:19	09/23/13 22:15	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10		%			09/23/13 16:33	1
Percent Moisture	26		0.10		%			09/23/13 16:33	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-145579/22-A
Matrix: Solid
Analysis Batch: 145639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/23/13 13:19	09/23/13 15:46	10
Barium	ND		0.20		mg/Kg		09/23/13 13:19	09/23/13 15:46	10
Cadmium	ND		0.20		mg/Kg		09/23/13 13:19	09/23/13 15:46	10
Chromium	ND		0.20		mg/Kg		09/23/13 13:19	09/23/13 15:46	10
Lead	ND		0.20		mg/Kg		09/23/13 13:19	09/23/13 15:46	10

Lab Sample ID: LCS 580-145579/23-A
Matrix: Solid
Analysis Batch: 145639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145579

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	196		mg/Kg		98	80 - 120
Barium	200	187		mg/Kg		94	80 - 120
Cadmium	5.00	4.63		mg/Kg		93	80 - 120
Chromium	20.0	19.1		mg/Kg		96	80 - 120
Lead	50.0	47.6		mg/Kg		95	80 - 120

Lab Sample ID: LCSD 580-145579/24-A
Matrix: Solid
Analysis Batch: 145639

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145579

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	194		mg/Kg		97	80 - 120	1	20
Barium	200	188		mg/Kg		94	80 - 120	0	20
Cadmium	5.00	4.40		mg/Kg		88	80 - 120	5	20
Chromium	20.0	19.2		mg/Kg		96	80 - 120	0	20
Lead	50.0	47.4		mg/Kg		95	80 - 120	0	20

Lab Sample ID: LCSSRM 580-145579/25-A
Matrix: Solid
Analysis Batch: 145639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145579

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	237	249		mg/Kg		104.9	71.3 - 129.1
Barium	252	250		mg/Kg		99.2	73.8 - 126.2
Cadmium	191	187		mg/Kg		98.1	73.3 - 126.7
Chromium	128	128		mg/Kg		100.0	65.5 - 129.7
Lead	103	101		mg/Kg		98.3	70.9 - 128.2

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40420-1 DU
 Matrix: Solid
 Analysis Batch: 145604

Client Sample ID: WFE-SW8-091913
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	
			Result	Qualifier			RPD	Limit
Percent Solids	84		83		%		0.9	20
Percent Moisture	16		17		%		5	20

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Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-SW8-091913

Lab Sample ID: 580-40420-1

Date Collected: 09/19/13 17:47

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 21:51	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-SW9-091913

Lab Sample ID: 580-40420-2

Date Collected: 09/19/13 17:42

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 72.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	145639	09/23/13 21:55	FCW	TAL SEA
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		1000	145644	09/24/13 07:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-SW10-091913

Lab Sample ID: 580-40420-3

Date Collected: 09/19/13 17:53

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	145639	09/23/13 21:59	FCW	TAL SEA
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		1000	145644	09/24/13 07:08	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-BS9-091913

Lab Sample ID: 580-40420-4

Date Collected: 09/19/13 08:15

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 22:24	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-BS10-091913

Lab Sample ID: 580-40420-5

Date Collected: 09/19/13 17:35

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 22:20	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Client Sample ID: WFE-BS11-091913

Lab Sample ID: 580-40420-6

Date Collected: 09/19/13 17:39

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 22:28	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-BS12-091913

Lab Sample ID: 580-40420-7

Date Collected: 09/19/13 17:50

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 72.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	145639	09/23/13 22:03	FCW	TAL SEA
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		1000	145644	09/24/13 07:13	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-BS112-091913

Lab Sample ID: 580-40420-8

Date Collected: 09/19/13 17:50

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 70.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	145639	09/23/13 22:07	FCW	TAL SEA
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		1000	145644	09/24/13 07:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-BS13-091913

Lab Sample ID: 580-40420-9

Date Collected: 09/19/13 18:15

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 22:11	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

Client Sample ID: WFE-BS14-091913

Lab Sample ID: 580-40420-10

Date Collected: 09/19/13 18:20

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 74.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145579	09/23/13 13:19	PAB	TAL SEA
Total/NA	Analysis	6020		10	145639	09/23/13 22:15	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145604	09/23/13 16:33	JJP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40420-1	WFE-SW8-091913	Solid	09/19/13 17:47	09/21/13 10:30
580-40420-2	WFE-SW9-091913	Solid	09/19/13 17:42	09/21/13 10:30
580-40420-3	WFE-SW10-091913	Solid	09/19/13 17:53	09/21/13 10:30
580-40420-4	WFE-BS9-091913	Solid	09/19/13 08:15	09/21/13 10:30
580-40420-5	WFE-BS10-091913	Solid	09/19/13 17:35	09/21/13 10:30
580-40420-6	WFE-BS11-091913	Solid	09/19/13 17:39	09/21/13 10:30
580-40420-7	WFE-BS12-091913	Solid	09/19/13 17:50	09/21/13 10:30
580-40420-8	WFE-BS112-091913	Solid	09/19/13 17:50	09/21/13 10:30
580-40420-9	WFE-BS13-091913	Solid	09/19/13 18:15	09/21/13 10:30
580-40420-10	WFE-BS14-091913	Solid	09/19/13 18:20	09/21/13 10:30





CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 1396110.04
 BNSF Project Name: PARKWAY
 BNSF Work Order No.: T101-110

Laboratory: TEST AMERICA
 Address: 5755 8TH STREET EAST
 City/State/Zip: TACOMA, WA 98424
 Project Manager: KAS ALLEN
 Phone: 253-835-6400
 Fax: 253-972-2435

BNSF Project Name: PARKWAY
 Project City: SPOKANE
 Project State of Origin: WASHINGTON

Company: KENNEDY JAMES CONSULTANTS
 Address: 37001 32ND AVES SUITE 100
 City/State/Zip: FEDERAL WAY WA 98001
 Project Manager: HOWARD YOUNG
 Email: howard.young@kenadvisors.com
 Phone: 253-835-6400
 Fax: 253-972-2435

TURNAROUND TIME
 1-day Rush
 2-day Rush
 3-day Rush
 5- to 8-day Rush
 Standard 10-Day
 Other: 24 HR RUSH

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables?
 K/S CUSTOM EDD
 EIM

CONSULTANT INFORMATION
 Project Manager: HOWARD YOUNG
 Tracking Number: 40420

SAMPLE INFORMATION

Containers	Sample Collection			Filtered (Y/N)	Type (Comp/Grab)	Matrix	AS, Cd, Cu, Pb, Total Cr by EPA 8220 NWTPH-DX DIESEL, OIL	METHODS FOR ANALYSIS
	Date	Time	Sampler					

1	WEE-SW8-091913	9/19/13	1747	DL	N	G	S		24-Hour Rush	LAB USE	1
2	WEE-SW9-091913	9/19/13	1742								2
3	WEE-SW10-091913	9/19/13	1753								3
4	WEE-BS9-092013	9/20/13	0815								4
5	WEE-BS10-091913	9/19/13	1735								5
6	WEE-BS11-091913	9/19/13	1739								6
7	WEE-BS12-091913	9/19/13	1750								7
8	WEE-BS11Z-091913	9/19/13	1750	DL							8
9	WEE-BS13-091913	9/19/13	1815	DN							9
10	WEE-BS14-091913	9/19/13	0820	HN							10
11	SP-R01-092013	9/20/13	12:30	HX	N	G	W				11

Relinquished By: [Signature] Date/Time: 9/20/13 14:40 Received By: [Signature] Date/Time: 9/20/13 14:40
 Relinquished By: [Signature] Date/Time: 9/20/13 15:00 Received By: [Signature] Date/Time: 9/20/13 10:30
 Received by Laboratory: [Signature] Date/Time: [] Lab Remarks: []
 Comments and Special Analytical Requirements: 15 A RINSATE SP-R01-092013 IS A RINSATE BLANK, RUN ON STANDARD TAT ON OTHER SAMPLES RUN 24-HOUR RUSH TAT.



ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
 DUPPLICATE
 580-40420 Chain of Custody
 TAL-1001 (09/09)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40420-2

Login Number: 40420

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40538-1
Client Project/Site: Parkwater RA
Revision: 1

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
11/19/2013 4:26:48 PM

Kristine Allen, Manager of Project Management
(253)922-2310
kristine.allen@testamericainc.com

LINKS

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results through
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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Job ID: 580-40538-1

Laboratory: TestAmerica Seattle

Narrative

Comments

Revised Report 11/18/13 - For samples DS-RB1-092413 (580-40538-5), WFE-RB1-092513 (580-40538-25) and WFE-RB1-092613 (580-40538-34), it was found that the initial calibration was incorrectly processed, where the retention time marker standard had the incorrect peak for n-Decane (nC10) identified. This caused the #2 Diesel (nC10-C24) range to integrate more area than normal, thereby causing a higher bias in this range for all samples. The initial calibration was fixed, and all subsequent samples were reprocessed.

Also a detection of #2 Diesel Fuel (C10-C24) was originally reported in the method blank, after the correction the method blank was non-detect for the affected range.

Receipt

The samples were received on 9/27/2013 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.4° C and 5.6° C.

Except:

Sample # DS-SW7-092413 was dropped during unloading from the cooler and broke. Sample glass was disposed of and the sample itself was swept up and placed in a one gallon zip lock baggie. Sample was taken from the zip lock baggie and analyzed per client request.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146589, the method blank for preparation batch 146444 contained Motor Oil (>C24-C36) above the reporting limit (RL). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

In analytical batch 146589, for the following sample(s) from preparation batch 146444: DS-RB1-092413 (580-40538-5), WFE-RB1-092513 (580-40538-25), WFE-RB1-092613 (580-40538-34), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Metals - Method(s) 6020

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 146090 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW5-092413

Lab Sample ID: 580-40538-1

Date Collected: 09/24/13 17:35

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 73.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	40		0.62		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Barium	430		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Cadmium	6.5		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Chromium	38		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Lead	1500		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/29/13 16:06	1
Percent Moisture	27		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW6-092413

Lab Sample ID: 580-40538-2

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 68.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		0.68		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Barium	520		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Cadmium	0.74		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Chromium	36		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Lead	2000		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68		0.10		%			09/29/13 16:06	1
Percent Moisture	32		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW7-092413

Lab Sample ID: 580-40538-3

Date Collected: 09/24/13 18:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 96.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.30		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Barium	62		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Cadmium	ND		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Chromium	10		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Lead	15		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10		%			09/29/13 16:06	1
Percent Moisture	3.6		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW106-092413

Lab Sample ID: 580-40538-4

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		0.68		mg/Kg	☼	09/29/13 14:48	09/30/13 12:32	10
Barium	440		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:32	10
Cadmium	0.61		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:32	10
Chromium	38		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:32	10
Lead	1000		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:32	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	71		0.10		%			09/29/13 16:06	1
Percent Moisture	29		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-RB1-092413

Lab Sample ID: 580-40538-5

Date Collected: 09/24/13 18:15

Matrix: Water

Date Received: 09/27/13 09:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/03/13 09:27	10/04/13 14:50	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/03/13 09:27	10/04/13 14:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/03/13 09:27	10/04/13 14:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/27/13 17:49	09/30/13 10:40	5
Barium	ND		0.0060		mg/L		09/27/13 17:49	09/30/13 10:40	5
Cadmium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:40	5
Chromium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:40	5
Lead	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:40	5

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW11-092513

Lab Sample ID: 580-40538-6

Date Collected: 09/25/13 13:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.8		0.45		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Barium	130		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Cadmium	1.4		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Chromium	13		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Lead	130		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:06	1
Percent Moisture	12		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW12-092513

Lab Sample ID: 580-40538-7

Date Collected: 09/25/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 74.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	34		0.49		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Barium	740		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Cadmium	24		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Chromium	20		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Lead	36000		20		mg/Kg	☼	09/29/13 14:48	09/30/13 13:21	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10		%			09/29/13 16:06	1
Percent Moisture	26		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW13-092513

Lab Sample ID: 580-40538-8

Date Collected: 09/25/13 16:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.55		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Barium	320		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Cadmium	ND		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Chromium	18		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Lead	17		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/29/13 16:06	1
Percent Moisture	14		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW14-092513

Lab Sample ID: 580-40538-9

Date Collected: 09/25/13 17:15

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 75.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	34		0.58		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Barium	380		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Cadmium	8.3		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Chromium	44		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Lead	2500		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10		%			09/29/13 16:06	1
Percent Moisture	25		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW15-092513

Lab Sample ID: 580-40538-10

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 65.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		0.71		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Barium	390		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Cadmium	9.0		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Chromium	27		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Lead	2900		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	65		0.10		%			09/29/13 16:06	1
Percent Moisture	35		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW115-092513

Lab Sample ID: 580-40538-11

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 72.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		0.48		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Barium	390		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Cadmium	3.4		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Chromium	19		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Lead	1800		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/29/13 16:06	1
Percent Moisture	27		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW16-092513

Lab Sample ID: 580-40538-12

Date Collected: 09/25/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	63		0.59		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Barium	510		0.23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Cadmium	10		0.23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Chromium	35		0.23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Lead	7500		23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:25	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	72		0.10		%			09/29/13 16:06	1
Percent Moisture	28		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW17-092613

Lab Sample ID: 580-40538-13

Date Collected: 09/26/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 79.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	52		0.59		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Barium	570		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Cadmium	1.6		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Chromium	17		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Lead	1000		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10		%			09/29/13 16:06	1
Percent Moisture	21		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW18-092613

Lab Sample ID: 580-40538-14

Date Collected: 09/26/13 13:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 84.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	48		0.51		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Barium	470		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Cadmium	7.7		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Chromium	33		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Lead	8300		20		mg/Kg	☼	09/29/13 14:48	09/30/13 13:17	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/29/13 16:06	1
Percent Moisture	16		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW19-092613

Lab Sample ID: 580-40538-15

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 93.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		0.48		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Barium	150		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Cadmium	3.5		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Chromium	19		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Lead	210		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/29/13 16:06	1
Percent Moisture	6.9		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW119-092613

Lab Sample ID: 580-40538-16

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 92.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.34		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Barium	140		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Cadmium	2.6		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Chromium	17		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Lead	150		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/29/13 16:06	1
Percent Moisture	7.2		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS15-092513

Lab Sample ID: 580-40538-17

Date Collected: 09/25/13 14:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.48		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Barium	88		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Cadmium	ND		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Chromium	20		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Lead	21		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS16-092513

Lab Sample ID: 580-40538-18

Date Collected: 09/25/13 14:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3		0.44		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Barium	52		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Cadmium	ND		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Chromium	13		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Lead	11		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			09/29/13 16:06	1
Percent Moisture	8.4		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS17-092513

Lab Sample ID: 580-40538-19

Date Collected: 09/25/13 14:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		0.35		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Barium	84		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Cadmium	ND		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Chromium	15		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Lead	12		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/29/13 16:06	1
Percent Moisture	11		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS18-092513

Lab Sample ID: 580-40538-20

Date Collected: 09/25/13 15:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		0.40		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Barium	110		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Cadmium	ND		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Chromium	14		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Lead	12		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS19-092513

Lab Sample ID: 580-40538-21

Date Collected: 09/25/13 16:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.0		0.53		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Barium	130		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Cadmium	ND		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Chromium	18		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Lead	13		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS20-092513

Lab Sample ID: 580-40538-22

Date Collected: 09/25/13 16:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.40		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Barium	110		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Cadmium	ND		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Chromium	14		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Lead	11		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:06	1
Percent Moisture	12		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS21-092513

Lab Sample ID: 580-40538-23

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.35		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Barium	220		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Cadmium	1.3		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Chromium	17		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Lead	1100		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS121-092513

Lab Sample ID: 580-40538-24

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.57		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Barium	300		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Cadmium	1.5		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Chromium	20		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Lead	1400		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-RB1-092513

Lab Sample ID: 580-40538-25

Date Collected: 09/25/13 17:58

Matrix: Water

Date Received: 09/27/13 09:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	Y	0.12		mg/L		10/03/13 09:27	10/04/13 15:08	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/03/13 09:27	10/04/13 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	74		50 - 150				10/03/13 09:27	10/04/13 15:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/27/13 17:49	09/30/13 10:45	5
Barium	ND		0.0060		mg/L		09/27/13 17:49	09/30/13 10:45	5
Cadmium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:45	5
Chromium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:45	5
Lead	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:45	5

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS22-092613

Lab Sample ID: 580-40538-26

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 90.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	15		0.48		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Barium	110		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Cadmium	0.96		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Chromium	9.4		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Lead	440		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/29/13 16:06	1
Percent Moisture	9.4		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS23-092613

Lab Sample ID: 580-40538-27

Date Collected: 09/26/13 12:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.0		0.38		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Barium	190		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Cadmium	0.55		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Chromium	11		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Lead	490		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/29/13 16:06	1
Percent Moisture	11		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS24-092613

Lab Sample ID: 580-40538-28

Date Collected: 09/26/13 12:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.3		0.41		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Barium	220		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Cadmium	0.37		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Chromium	17		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Lead	240		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/29/13 16:06	1
Percent Moisture	11		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS25-092613

Lab Sample ID: 580-40538-29

Date Collected: 09/26/13 12:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.38		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Barium	120		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Cadmium	ND		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Chromium	15		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Lead	18		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:11	1
Percent Moisture	12		0.10		%			09/29/13 16:11	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS26-092613

Lab Sample ID: 580-40538-30

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.35		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Barium	120		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Cadmium	ND		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Chromium	18		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Lead	14		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/29/13 16:11	1
Percent Moisture	9.0		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS126-092613

Lab Sample ID: 580-40538-31

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		0.49		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Barium	100		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Cadmium	ND		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Chromium	15		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Lead	12		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/29/13 16:11	1
Percent Moisture	10		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS27-092613

Lab Sample ID: 580-40538-32

Date Collected: 09/26/13 12:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.6		0.43		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Barium	130		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Cadmium	ND		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Chromium	16		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Lead	52		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:11	1
Percent Moisture	13		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS28-092613

Lab Sample ID: 580-40538-33

Date Collected: 09/26/13 12:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.9		0.46		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Barium	130		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Cadmium	1.4		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Chromium	17		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Lead	180		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:11	1
Percent Moisture	12		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-RB1-092613

Lab Sample ID: 580-40538-34

Date Collected: 09/26/13 12:52

Matrix: Water

Date Received: 09/27/13 09:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	Y	0.12		mg/L		10/03/13 09:27	10/04/13 15:26	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/03/13 09:27	10/04/13 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				10/03/13 09:27	10/04/13 15:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/27/13 17:49	09/30/13 10:49	5
Barium	ND		0.0060		mg/L		09/27/13 17:49	09/30/13 10:49	5
Cadmium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:49	5
Chromium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:49	5
Lead	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:49	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146444/1-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/03/13 09:27	10/04/13 13:56	1
Motor Oil (>C24-C36)	0.300		0.25		mg/L		10/03/13 09:27	10/04/13 13:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150	10/03/13 09:27	10/04/13 13:56	1

Lab Sample ID: LCS 580-146444/2-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.28		mg/L		82	70 - 140
Motor Oil (>C24-C36)	4.00	3.77		mg/L		94	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	86		50 - 150

Lab Sample ID: LCSD 580-146444/3-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.22		mg/L		80	70 - 140	2	27
Motor Oil (>C24-C36)	4.00	3.78		mg/L		95	66 - 125	0	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	85		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146090/22-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146090

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Barium	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Cadmium	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Chromium	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Lead	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2

Lab Sample ID: LCS 580-146090/23-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	195		mg/Kg		98	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-146090/23-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.21		mg/Kg		84	80 - 120
Chromium	20.0	20.5		mg/Kg		102	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 580-146090/24-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146090

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	195		mg/Kg		97	80 - 120	0	20
Barium	200	193		mg/Kg		96	80 - 120	1	20
Cadmium	5.00	4.36		mg/Kg		87	80 - 120	3	20
Chromium	20.0	20.9		mg/Kg		105	80 - 120	2	20
Lead	50.0	49.7		mg/Kg		99	80 - 120	1	20

Lab Sample ID: MB 580-146094/19-A
Matrix: Solid
Analysis Batch: 146200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Barium	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Cadmium	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Chromium	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Lead	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10

Lab Sample ID: LCS 580-146094/20-A
Matrix: Solid
Analysis Batch: 146200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	197		mg/Kg		98	80 - 120
Barium	200	188		mg/Kg		94	80 - 120
Cadmium	5.00	4.27		mg/Kg		85	80 - 120
Chromium	20.0	20.6		mg/Kg		103	80 - 120
Lead	50.0	49.5		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 580-146094/21-A
Matrix: Solid
Analysis Batch: 146200

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146094

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	197		mg/Kg		98	80 - 120	0	20
Barium	200	191		mg/Kg		96	80 - 120	2	20
Cadmium	5.00	4.40		mg/Kg		88	80 - 120	3	20
Chromium	20.0	20.6		mg/Kg		103	80 - 120	0	20
Lead	50.0	49.3		mg/Kg		99	80 - 120	0	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40538-18 MS

Matrix: Solid

Analysis Batch: 146200

Client Sample ID: WFE-BS16-092513

Prep Type: Total/NA

Prep Batch: 146094

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Arsenic	6.3		179	183		mg/Kg	☼	99	80 - 120	
Barium	52		179	234		mg/Kg	☼	102	80 - 120	
Cadmium	ND		4.48	4.20		mg/Kg	☼	92	80 - 120	
Chromium	13		17.9	31.1		mg/Kg	☼	100	80 - 120	
Lead	11		44.8	54.4		mg/Kg	☼	97	80 - 120	

Lab Sample ID: 580-40538-18 MSD

Matrix: Solid

Analysis Batch: 146200

Client Sample ID: WFE-BS16-092513

Prep Type: Total/NA

Prep Batch: 146094

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit	
Arsenic	6.3		180	189		mg/Kg	☼	101	80 - 120	3	20	20	
Barium	52		180	236		mg/Kg	☼	103	80 - 120	1	20	20	
Cadmium	ND		4.50	4.11		mg/Kg	☼	90	80 - 120	2	20	20	
Chromium	13		18.0	33.6		mg/Kg	☼	114	80 - 120	8	20	20	
Lead	11		45.0	58.0		mg/Kg	☼	104	80 - 120	6	20	20	

Lab Sample ID: 580-40538-18 DU

Matrix: Solid

Analysis Batch: 146200

Client Sample ID: WFE-BS16-092513

Prep Type: Total/NA

Prep Batch: 146094

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	6.3		6.40		mg/Kg	☼	1	20
Barium	52		52.5		mg/Kg	☼	2	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	13		13.1		mg/Kg	☼	0.2	20
Lead	11		11.2		mg/Kg	☼	0.9	20

Lab Sample ID: MB 580-146030/16-A

Matrix: Water

Analysis Batch: 146157

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 146030

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		09/27/13 17:51	09/30/13 09:34	1
Barium	ND		0.0012		mg/L		09/27/13 17:51	09/30/13 09:34	1
Cadmium	ND		0.00040		mg/L		09/27/13 17:51	09/30/13 09:34	1
Chromium	ND		0.00040		mg/L		09/27/13 17:51	09/30/13 09:34	1
Lead	ND		0.00040		mg/L		09/27/13 17:51	09/30/13 09:34	1

Lab Sample ID: LCS 580-146030/17-A

Matrix: Water

Analysis Batch: 146157

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 146030

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
	Added	Result	Qualifier				Limits	Limits
Arsenic	4.00	3.88		mg/L		97	80 - 120	
Barium	4.00	3.78		mg/L		94	80 - 120	
Cadmium	0.100	0.0886		mg/L		89	80 - 120	
Chromium	0.400	0.410		mg/L		102	80 - 120	
Lead	1.00	0.997		mg/L		100	80 - 120	

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-146030/18-A
Matrix: Water
Analysis Batch: 146157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 146030

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
Arsenic	4.00	3.93		mg/L		98	80 - 120	1	20
Barium	4.00	3.84		mg/L		96	80 - 120	2	20
Cadmium	0.100	0.0912		mg/L		91	80 - 120	3	20
Chromium	0.400	0.408		mg/L		102	80 - 120	0	20
Lead	1.00	0.983		mg/L		98	80 - 120	1	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40538-18 DU
Matrix: Solid
Analysis Batch: 146095

Client Sample ID: WFE-BS16-092513
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD
								Limit
Percent Solids	92		92		%		0.6	20
Percent Moisture	8.4		7.8		%		6	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW5-092413

Lab Sample ID: 580-40538-1

Date Collected: 09/24/13 17:35

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 73.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:28	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-SW6-092413

Lab Sample ID: 580-40538-2

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 68.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-SW7-092413

Lab Sample ID: 580-40538-3

Date Collected: 09/24/13 18:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 11:59	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-SW106-092413

Lab Sample ID: 580-40538-4

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:32	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-RB1-092413

Lab Sample ID: 580-40538-5

Date Collected: 09/24/13 18:15

Matrix: Water

Date Received: 09/27/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146589	10/04/13 14:50	JL1	TAL SEA
Total Recoverable	Prep	3005A			146030	09/27/13 17:49	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146157	09/30/13 10:40	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW11-092513

Lab Sample ID: 580-40538-6

Date Collected: 09/25/13 13:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW12-092513

Lab Sample ID: 580-40538-7

Date Collected: 09/25/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:52	FCW	TAL SEA
Total/NA	Analysis	6020		1000	146157	09/30/13 13:21	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW13-092513

Lab Sample ID: 580-40538-8

Date Collected: 09/25/13 16:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:08	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW14-092513

Lab Sample ID: 580-40538-9

Date Collected: 09/25/13 17:15

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:56	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW15-092513

Lab Sample ID: 580-40538-10

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 65.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 13:00	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW115-092513

Lab Sample ID: 580-40538-11

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 72.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 13:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW16-092513

Lab Sample ID: 580-40538-12

Date Collected: 09/25/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	146157	09/30/13 13:08	FCW	TAL SEA
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		1000	146157	09/30/13 13:25	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW17-092613

Lab Sample ID: 580-40538-13

Date Collected: 09/26/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 13:12	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW18-092613

Lab Sample ID: 580-40538-14

Date Collected: 09/26/13 13:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:24	FCW	TAL SEA
Total/NA	Analysis	6020		1000	146157	09/30/13 13:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW19-092613

Lab Sample ID: 580-40538-15

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:12	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW119-092613

Lab Sample ID: 580-40538-16

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:20	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS15-092513

Lab Sample ID: 580-40538-17

Date Collected: 09/25/13 14:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:16	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS16-092513

Lab Sample ID: 580-40538-18

Date Collected: 09/25/13 14:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:09	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS17-092513

Lab Sample ID: 580-40538-19

Date Collected: 09/25/13 14:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:42	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS18-092513

Lab Sample ID: 580-40538-20

Date Collected: 09/25/13 15:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:46	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS19-092513

Lab Sample ID: 580-40538-21

Date Collected: 09/25/13 16:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:50	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS20-092513

Lab Sample ID: 580-40538-22

Date Collected: 09/25/13 16:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:54	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS21-092513

Lab Sample ID: 580-40538-23

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:58	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS121-092513

Lab Sample ID: 580-40538-24

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:02	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-RB1-092513

Lab Sample ID: 580-40538-25

Date Collected: 09/25/13 17:58

Matrix: Water

Date Received: 09/27/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146589	10/04/13 15:08	JL1	TAL SEA
Total Recoverable	Prep	3005A			146030	09/27/13 17:49	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146157	09/30/13 10:45	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS22-092613

Lab Sample ID: 580-40538-26

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:06	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS23-092613

Lab Sample ID: 580-40538-27

Date Collected: 09/26/13 12:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:11	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS24-092613

Lab Sample ID: 580-40538-28

Date Collected: 09/26/13 12:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:15	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS25-092613

Lab Sample ID: 580-40538-29

Date Collected: 09/26/13 12:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:31	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-BS26-092613

Lab Sample ID: 580-40538-30

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS126-092613

Lab Sample ID: 580-40538-31

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:39	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-BS27-092613

Lab Sample ID: 580-40538-32

Date Collected: 09/26/13 12:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:43	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-BS28-092613

Lab Sample ID: 580-40538-33

Date Collected: 09/26/13 12:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-RB1-092613

Lab Sample ID: 580-40538-34

Date Collected: 09/26/13 12:52

Matrix: Water

Date Received: 09/27/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146589	10/04/13 15:26	JL1	TAL SEA
Total Recoverable	Prep	3005A			146030	09/27/13 17:49	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146157	09/30/13 10:49	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40538-1	DS-SW5-092413	Solid	09/24/13 17:35	09/27/13 09:45
580-40538-2	DS-SW6-092413	Solid	09/24/13 17:50	09/27/13 09:45
580-40538-3	DS-SW7-092413	Solid	09/24/13 18:10	09/27/13 09:45
580-40538-4	DS-SW106-092413	Solid	09/24/13 17:50	09/27/13 09:45
580-40538-5	DS-RB1-092413	Water	09/24/13 18:15	09/27/13 09:45
580-40538-6	WFE-SW11-092513	Solid	09/25/13 13:10	09/27/13 09:45
580-40538-7	WFE-SW12-092513	Solid	09/25/13 13:20	09/27/13 09:45
580-40538-8	WFE-SW13-092513	Solid	09/25/13 16:45	09/27/13 09:45
580-40538-9	WFE-SW14-092513	Solid	09/25/13 17:15	09/27/13 09:45
580-40538-10	WFE-SW15-092513	Solid	09/25/13 17:25	09/27/13 09:45
580-40538-11	WFE-SW115-092513	Solid	09/25/13 17:25	09/27/13 09:45
580-40538-12	WFE-SW16-092513	Solid	09/25/13 17:50	09/27/13 09:45
580-40538-13	WFE-SW17-092613	Solid	09/26/13 13:20	09/27/13 09:45
580-40538-14	WFE-SW18-092613	Solid	09/26/13 13:30	09/27/13 09:45
580-40538-15	WFE-SW19-092613	Solid	09/26/13 13:40	09/27/13 09:45
580-40538-16	WFE-SW119-092613	Solid	09/26/13 13:40	09/27/13 09:45
580-40538-17	WFE-BS15-092513	Solid	09/25/13 14:45	09/27/13 09:45
580-40538-18	WFE-BS16-092513	Solid	09/25/13 14:50	09/27/13 09:45
580-40538-19	WFE-BS17-092513	Solid	09/25/13 14:55	09/27/13 09:45
580-40538-20	WFE-BS18-092513	Solid	09/25/13 15:40	09/27/13 09:45
580-40538-21	WFE-BS19-092513	Solid	09/25/13 16:00	09/27/13 09:45
580-40538-22	WFE-BS20-092513	Solid	09/25/13 16:30	09/27/13 09:45
580-40538-23	WFE-BS21-092513	Solid	09/25/13 17:40	09/27/13 09:45
580-40538-24	WFE-BS121-092513	Solid	09/25/13 17:40	09/27/13 09:45
580-40538-25	WFE-RB1-092513	Water	09/25/13 17:58	09/27/13 09:45
580-40538-26	WFE-BS22-092613	Solid	09/26/13 12:00	09/27/13 09:45
580-40538-27	WFE-BS23-092613	Solid	09/26/13 12:10	09/27/13 09:45
580-40538-28	WFE-BS24-092613	Solid	09/26/13 12:20	09/27/13 09:45
580-40538-29	WFE-BS25-092613	Solid	09/26/13 12:30	09/27/13 09:45
580-40538-30	WFE-BS26-092613	Solid	09/26/13 12:40	09/27/13 09:45
580-40538-31	WFE-BS126-092613	Solid	09/26/13 12:40	09/27/13 09:45
580-40538-32	WFE-BS27-092613	Solid	09/26/13 12:50	09/27/13 09:45
580-40538-33	WFE-BS28-092613	Solid	09/26/13 12:55	09/27/13 09:45
580-40538-34	WFE-RB1-092613	Water	09/26/13 12:52	09/27/13 09:45

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 3 day
 2 weeks
 1 week
 2 days
 1 day

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 9/24/13
Carrier: _____
COC No: 1 of 4 COCs

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOX Metals (As, Pb, Cd, Cr, Ba) (Y/N)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8290)	Sample Specific Notes
DS-SW5-092413	9/24/13	1735	Grab	SS	1							
DS-SW6-092413		1750			1							
DS-SW7-092413		1810			1							
DS-SW106-092413		1750			1							
DS-RB1-092413		1815		W	3							
WFE-SW11-092513	9/25/13	1310	Grab	SS	1							
WFE-SW12-092513		1320			1							
WFE-SW13-092513		1645			1							
WFE-SW14-092513		1715			1							
WFE-SW15-092513		1725			1							
WFE-SW115-092513		1725			1							



Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Cooler Temp. (°C): Obs'd: _____ Cor'd: _____ Therm ID No.: _____

Relinquished by: *Mike Wilson* Company: Kennedy Tanks Consultants Date/Time: 9/26/13 15:35

Relinquished by: *John A. Sheppard* Company: TestAmerica Date/Time: 9/26/13 15:35

Relinquished by: *John A. Sheppard* Company: TestAmerica Date/Time: 9/27/13 9:45



Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/253-952-3435

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below _____ 3 day
 2 weeks
 1 week
 2 days
 1 day

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 9/25/13
Carrier:

COC No.: 3 of 4 COCs

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOTM (As Pb, Cd, Cr, Hg, Se, Ag) (411/6020) (Y/N)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Sample Specific Notes:
WFE-BS21-092513	9/25/13	1740	G	SS	1	✓	✓	✓			NMTPH-DX W/SYC	
WFE-BS121-092513	↓	1740	↓	↓	1	✓	✓	✓				
WFE-RB1-092513	↓	1758		W	3	✓	✓	✓				
WFE-BS22-092613	9/26/13	1200	G	SS	1	✓	✓	✓				
WFE-BS23-092613	↓	1210				✓	✓	✓				
WFE-BS24-092613	↓	1220				✓	✓	✓				
WFE-BS25-092613	↓	1230				✓	✓	✓				
WFE-BS26-092613	↓	1240				✓	✓	✓				
WFE-BS126-092613	↓	1240				✓	✓	✓				
WFE-BS27-092613	↓	1250				✓	✓	✓				
WFE-BS28-092613	↓	1255				✓	✓	✓				

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seal No.: _____
Cooler Temp. (°C): Obs'd: _____ Cor'd: _____
Therm ID No.: _____

Relinquished by: *Michelle Johnson*
Relinquished by: *Kenny Jank Lovatlands*
Relinquished by: *John C. Wood*

Received by: *TestAmerica*
Received by: *AA SA*
Received in Laboratory by: _____

Date/Time: 9/26/13 15:30
Date/Time: 9/26/13 16:35
Date/Time: 9/27/13 9:45

Company: *Kenny Jank Lovatlands*
Company: *TestAmerica*
Company: _____

3



Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA MTECA MTCA

TestAmerica Laboratories, Inc.

Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below _____ 3 day
 2 weeks
 1 week
 2 days
 1 day

Date: 9/26/13
COC No: 4 of 4 COCs

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOP Metals (As, Pb, Cd, Cr, Ba, Hg, Ag, Ni, Cu, Zn, Mn, V, Se, Mo, W, Sb, Bi, Sn, Ti, Al, Si, Fe, Ni, Cu, Zn, Mn, V, Se, Mo, W, Sb, Bi, Sn, Ti, Al, Si, Fe)	Semivolatile Organics (8270)	Volatile Organic Compounds (8260)	Carrier	Sample Specific Notes
WFE - R01 - 092613	9/26/13	1252	W	3	✓	✓	✓	✓	✓	✓	Carrier	Cooler/TB Dig/IR cor 3.1.4 unc 3.1.4 Cooler Dsc @ Lab WetPacks Packing w/ Co Folly P.O.

Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Please List any EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for 1 Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seal No.: _____
Custody Seals Intact: Yes No

Relinquished by: _____
Date/Time: 9/26/13 15:35
Company: TestAmerica

Relinquished by: _____
Date/Time: 9/27/13 9:45
Company: AP SA

Relinquished by: _____
Date/Time: _____
Company: _____

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40538-1

Login Number: 40538

List Source: TestAmerica Seattle

List Number: 1

Creator: McDaniel, Ronald T

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.	N/A	
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?	N/A	Refer to Job Narrative for details.
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40688-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young



Authorized for release by:
10/7/2013 1:40:39 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

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Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Job ID: 580-40688-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/4/2013 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Except:

The sampling containers do not have a lot number on the container to scan.

Metals - Method(s) 6020

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 146584 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.



Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Qualifiers

Metals

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-SW20-100313

Lab Sample ID: 580-40688-1

Date Collected: 10/03/13 09:25

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 79.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.0		0.54		mg/Kg	☼	10/04/13 11:45	10/04/13 14:12	10
Barium	210		0.22		mg/Kg	☼	10/04/13 11:45	10/04/13 14:12	10
Cadmium	8.2		0.22		mg/Kg	☼	10/04/13 11:45	10/04/13 14:12	10
Chromium	11		0.22		mg/Kg	☼	10/04/13 11:45	10/04/13 14:12	10
Lead	43		0.22		mg/Kg	☼	10/04/13 11:45	10/04/13 14:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10		%			10/04/13 12:29	1
Percent Moisture	21		0.10		%			10/04/13 12:29	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-SW21-100313

Lab Sample ID: 580-40688-2

Date Collected: 10/03/13 09:30

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 74.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.65		mg/Kg	☼	10/04/13 11:45	10/04/13 14:33	10
Barium	220		0.26		mg/Kg	☼	10/04/13 11:45	10/04/13 14:33	10
Cadmium	1.9		0.26		mg/Kg	☼	10/04/13 11:45	10/04/13 14:33	10
Chromium	15		0.26		mg/Kg	☼	10/04/13 11:45	10/04/13 14:33	10
Lead	290		0.26		mg/Kg	☼	10/04/13 11:45	10/04/13 14:33	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10		%			10/04/13 12:29	1
Percent Moisture	25		0.10		%			10/04/13 12:29	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-BS29-100313

Lab Sample ID: 580-40688-3

Date Collected: 10/03/13 09:35

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 88.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.36		mg/Kg	☼	10/04/13 11:45	10/04/13 14:37	10
Barium	160		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:37	10
Cadmium	0.16		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:37	10
Chromium	15		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:37	10
Lead	32		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:37	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/04/13 12:29	1
Percent Moisture	11		0.10		%			10/04/13 12:29	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-SW121-100313

Lab Sample ID: 580-40688-4

Date Collected: 10/03/13 09:00

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 74.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.9		0.61		mg/Kg	☼	10/04/13 11:45	10/04/13 14:41	10
Barium	220		0.24		mg/Kg	☼	10/04/13 11:45	10/04/13 14:41	10
Cadmium	1.7		0.24		mg/Kg	☼	10/04/13 11:45	10/04/13 14:41	10
Chromium	11		0.24		mg/Kg	☼	10/04/13 11:45	10/04/13 14:41	10
Lead	160		0.24		mg/Kg	☼	10/04/13 11:45	10/04/13 14:41	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10		%			10/04/13 12:29	1
Percent Moisture	25		0.10		%			10/04/13 12:29	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-BS30-100313

Lab Sample ID: 580-40688-5

Date Collected: 10/03/13 13:45

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 88.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.35		mg/Kg	☼	10/04/13 11:45	10/04/13 14:54	10
Barium	140		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:54	10
Cadmium	1.1		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:54	10
Chromium	14		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:54	10
Lead	13		0.14		mg/Kg	☼	10/04/13 11:45	10/04/13 14:54	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/04/13 12:29	1
Percent Moisture	11		0.10		%			10/04/13 12:29	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-BS31-100313

Lab Sample ID: 580-40688-6

Date Collected: 10/03/13 13:50

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 87.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		0.39		mg/Kg	☼	10/04/13 11:45	10/04/13 15:14	10
Barium	110		0.16		mg/Kg	☼	10/04/13 11:45	10/04/13 15:14	10
Cadmium	ND		0.16		mg/Kg	☼	10/04/13 11:45	10/04/13 15:14	10
Chromium	11		0.16		mg/Kg	☼	10/04/13 11:45	10/04/13 15:14	10
Lead	11		0.16		mg/Kg	☼	10/04/13 11:45	10/04/13 15:14	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/04/13 12:29	1
Percent Moisture	13		0.10		%			10/04/13 12:29	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-SW22-100313

Lab Sample ID: 580-40688-7

Date Collected: 10/03/13 13:55

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 87.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.4		0.37		mg/Kg	☼	10/04/13 11:45	10/04/13 14:58	10
Barium	120		0.15		mg/Kg	☼	10/04/13 11:45	10/04/13 14:58	10
Cadmium	0.42		0.15		mg/Kg	☼	10/04/13 11:45	10/04/13 14:58	10
Chromium	12		0.15		mg/Kg	☼	10/04/13 11:45	10/04/13 14:58	10
Lead	76		0.15		mg/Kg	☼	10/04/13 11:45	10/04/13 14:58	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/04/13 12:29	1
Percent Moisture	13		0.10		%			10/04/13 12:29	1



QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146584/18-A
Matrix: Solid
Analysis Batch: 146667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/Kg		10/04/13 11:45	10/04/13 13:43	2
Barium	ND		0.040		mg/Kg		10/04/13 11:45	10/04/13 13:43	2
Cadmium	ND		0.040		mg/Kg		10/04/13 11:45	10/04/13 13:43	2
Chromium	ND		0.040		mg/Kg		10/04/13 11:45	10/04/13 13:43	2
Lead	ND		0.040		mg/Kg		10/04/13 11:45	10/04/13 13:43	2

Lab Sample ID: LCS 580-146584/19-A
Matrix: Solid
Analysis Batch: 146667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	201		mg/Kg		100	80 - 120
Barium	200	213		mg/Kg		107	80 - 120
Cadmium	5.00	4.87		mg/Kg		97	80 - 120
Chromium	20.0	19.6		mg/Kg		98	80 - 120
Lead	50.0	51.8		mg/Kg		104	80 - 120

Lab Sample ID: LCSD 580-146584/20-A
Matrix: Solid
Analysis Batch: 146667

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146584

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	201		mg/Kg		100	80 - 120	0	20
Barium	200	212		mg/Kg		106	80 - 120	0	20
Cadmium	5.00	4.61		mg/Kg		92	80 - 120	5	20
Chromium	20.0	19.9		mg/Kg		100	80 - 120	2	20
Lead	50.0	51.2		mg/Kg		102	80 - 120	1	20

Lab Sample ID: 580-40688-1 MS
Matrix: Solid
Analysis Batch: 146667

Client Sample ID: WFE-SW20-100313
Prep Type: Total/NA
Prep Batch: 146584

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	6.0		230	232		mg/Kg	✱	98	80 - 120
Barium	210		230	490	F	mg/Kg	✱	122	80 - 120
Cadmium	8.2		5.76	11.8	F	mg/Kg	✱	63	80 - 120
Chromium	11		23.0	35.2		mg/Kg	✱	106	80 - 120
Lead	43		57.6	110		mg/Kg	✱	117	80 - 120

Lab Sample ID: 580-40688-1 MSD
Matrix: Solid
Analysis Batch: 146667

Client Sample ID: WFE-SW20-100313
Prep Type: Total/NA
Prep Batch: 146584

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	6.0		194	211		mg/Kg	✱	106	80 - 120	10	20
Barium	210		194	414		mg/Kg	✱	106	80 - 120	17	20
Cadmium	8.2		4.86	13.2		mg/Kg	✱	103	80 - 120	11	20
Chromium	11		19.4	33.9		mg/Kg	✱	119	80 - 120	4	20
Lead	43		48.6	95.1		mg/Kg	✱	108	80 - 120	14	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40688-1 DU

Matrix: Solid

Analysis Batch: 146667

Client Sample ID: WFE-SW20-100313

Prep Type: Total/NA

Prep Batch: 146584

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	6.0		6.11		mg/Kg	☼	2	20
Barium	210		212		mg/Kg	☼	2	20
Cadmium	8.2		8.16		mg/Kg	☼	0.05	20
Chromium	11		10.9		mg/Kg	☼	0.9	20
Lead	43		44.3		mg/Kg	☼	4	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-SW20-100313

Lab Sample ID: 580-40688-1

Date Collected: 10/03/13 09:25

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 14:12	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

Client Sample ID: WFE-SW21-100313

Lab Sample ID: 580-40688-2

Date Collected: 10/03/13 09:30

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 14:33	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

Client Sample ID: WFE-BS29-100313

Lab Sample ID: 580-40688-3

Date Collected: 10/03/13 09:35

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 14:37	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

Client Sample ID: WFE-SW121-100313

Lab Sample ID: 580-40688-4

Date Collected: 10/03/13 09:00

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 14:41	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

Client Sample ID: WFE-BS30-100313

Lab Sample ID: 580-40688-5

Date Collected: 10/03/13 13:45

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 14:54	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Client Sample ID: WFE-BS31-100313

Lab Sample ID: 580-40688-6

Date Collected: 10/03/13 13:50

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 15:14	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

Client Sample ID: WFE-SW22-100313

Lab Sample ID: 580-40688-7

Date Collected: 10/03/13 13:55

Matrix: Solid

Date Received: 10/04/13 09:25

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146584	10/04/13 11:45	PAB	TAL SEA
Total/NA	Analysis	6020		10	146667	10/04/13 14:58	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146593	10/04/13 12:29	PAB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40688-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40688-1	WFE-SW20-100313	Solid	10/03/13 09:25	10/04/13 09:25
580-40688-2	WFE-SW21-100313	Solid	10/03/13 09:30	10/04/13 09:25
580-40688-3	WFE-BS29-100313	Solid	10/03/13 09:35	10/04/13 09:25
580-40688-4	WFE-SW121-100313	Solid	10/03/13 09:00	10/04/13 09:25
580-40688-5	WFE-BS30-100313	Solid	10/03/13 13:45	10/04/13 09:25
580-40688-6	WFE-BS31-100313	Solid	10/03/13 13:50	10/04/13 09:25
580-40688-7	WFE-SW22-100313	Solid	10/03/13 13:55	10/04/13 09:25



TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA OMEGA MTCA
Project Manager: Howard Young
Site Contact: Howard Young
Date: 10/13/13
Carrier: 101313
COC No: 1 of 1 COCS

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451
Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
TAT if different from Below: 3 day
Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10
SAMPLER: Walk-in Client Lab Sampling:
Job / SDG No.: 401088

Sample Identification	Sample Date	Sample Time	Sample Type (O-Comp, G-grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Co, Ag) (4244/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Carrier	Sample Specific Notes:
WFE-SW20-100313	10/13/13	0925	G	S	1	X	X	X				1	
WFE-SW21-100313		0930	G	S	1	X	X	X				2	
WFE-B529-100313		0935	G	S	1	X	X	X				3	
WFE-SW121-100313		0940	G	S	1	X	X	X				4	
WFE-B530-100313		1345	G	S	1	X	X	X				5	
WFE-B531-100313		1350	G	S	1	X	X	X				6	
WFE-SW22-100313		1355	G	S	1	X	X	X				7	

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-hazard Flammable Skin Irritant Poison B Unknown
Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for 1 Months
Cooler/TB DigIR cor 5.0 unc 5.5
Cooler Dsc *WetPacks* @ Lab
WetPacks Packing *W/03 Fodor P.O.*
Barcode: 580-40688 Chain of Custody
Custody Seals Intact: Yes No
Custody Seal No.:
Cooler Temp. (C): Obs'd:
Therm ID No.:
Relinquished by: *Bruce Sheppard* Company: *TestAmerica* Date/Time: *10/13/13 9:25*
Relinquished by: *Howard Young* Company: *TestAmerica* Date/Time: *10/13/13 14:45*

10/4/2013

Login Container Summary Report

Samples unloaded onto a cart in walk-in, labeled in walk-in.

Temperature readings ^{Co. 10/4/13} 4.5°C @ 11:15 AM, given to lab @ 11:18.

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> pH	<u>Preservative</u> Added (mls)	<u>Lot #</u>
-------------------------	---------------	-----------------------	------------------------	------------------------------------	--------------



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40688-1

Login Number: 40688

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	Not present
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?	False	Not filled in on CoC
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Dismantling Spur

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40386-1
Client Project/Site: Parkwater

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/7/2013 4:44:18 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

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results through
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Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Job ID: 580-40386-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 9/20/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 6.0° C.

Except:

The following samples was activated for Metals analysis by the client on 9-22-2013.DS-RB1-091813 (580-40386-7). This analysis was not originally requested on the chain-of-custody (COC).

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146331, from preparation batch 146344 the method blank contained #2 Diesel Fuel (C10-C24) above the reporting limit (RL). None of the samples associated with this method blank contained the target compound greater than the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Client Sample ID: DS-RB1-091813

Lab Sample ID: 580-40386-7

Date Collected: 09/18/13 16:40

Matrix: Water

Date Received: 09/20/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/02/13 09:10	10/02/13 18:45	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/02/13 09:10	10/02/13 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				10/02/13 09:10	10/02/13 18:45	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/01/13 18:36	10/02/13 13:34	5
Barium	ND		0.0060		mg/L		10/01/13 18:36	10/02/13 13:34	5
Cadmium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:34	5
Chromium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:34	5
Lead	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:34	5

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Client Sample ID: WFE-RB1-091913

Lab Sample ID: 580-40386-24

Date Collected: 09/19/13 15:24

Matrix: Water

Date Received: 09/20/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/02/13 14:25	10/04/13 22:51	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/02/13 14:25	10/04/13 22:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				10/02/13 14:25	10/04/13 22:51	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/01/13 18:36	10/02/13 13:38	5
Barium	ND		0.0060		mg/L		10/01/13 18:36	10/02/13 13:38	5
Cadmium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:38	5
Chromium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:38	5
Lead	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 13:38	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146344/1-A

Matrix: Water

Analysis Batch: 146331

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.149		0.13		mg/L		10/02/13 09:10	10/02/13 17:51	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/02/13 09:10	10/02/13 17:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150	10/02/13 09:10	10/02/13 17:51	1

Lab Sample ID: LCS 580-146344/2-A

Matrix: Water

Analysis Batch: 146331

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146344

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	4.00	3.68		mg/L		92	70 - 140
Motor Oil (>C24-C36)	4.00	4.03		mg/L		101	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	96		50 - 150

Lab Sample ID: LCSD 580-146344/3-A

Matrix: Water

Analysis Batch: 146331

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 146344

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	3.81		mg/L		95	70 - 140	3	27
Motor Oil (>C24-C36)	4.00	4.06		mg/L		101	66 - 125	1	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	96		50 - 150

Lab Sample ID: MB 580-146396/1-A

Matrix: Water

Analysis Batch: 146590

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/02/13 14:25	10/04/13 21:57	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/02/13 14:25	10/04/13 21:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150	10/02/13 14:25	10/04/13 21:57	1

Lab Sample ID: LCS 580-146396/2-A

Matrix: Water

Analysis Batch: 146590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	4.00	4.20		mg/L		105	70 - 140
Motor Oil (>C24-C36)	4.00	4.40		mg/L		110	66 - 125

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-146396/2-A
Matrix: Water
Analysis Batch: 146590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146396

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	107		50 - 150

Lab Sample ID: LCSD 580-146396/3-A
Matrix: Water
Analysis Batch: 146590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
#2 Diesel (C10-C24)	4.00	4.19		mg/L		105	70 - 140	0	27	
Motor Oil (>C24-C36)	4.00	4.37		mg/L		109	66 - 125	1	27	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	106		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146311/20-A
Matrix: Water
Analysis Batch: 146390

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 146311

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0050		mg/L		10/01/13 18:36	10/02/13 11:20	5
Barium	ND		0.0060		mg/L		10/01/13 18:36	10/02/13 11:20	5
Cadmium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 11:20	5
Chromium	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 11:20	5
Lead	ND		0.0020		mg/L		10/01/13 18:36	10/02/13 11:20	5

Lab Sample ID: LCS 580-146311/21-A
Matrix: Water
Analysis Batch: 146390

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 146311

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	RPD
Arsenic	4.00	4.00		mg/L		100	80 - 120	
Barium	4.00	4.05		mg/L		101	80 - 120	
Cadmium	0.100	0.0879		mg/L		88	80 - 120	
Chromium	0.400	0.413		mg/L		103	80 - 120	
Lead	1.00	1.01		mg/L		101	80 - 120	

Lab Sample ID: LCSD 580-146311/22-A
Matrix: Water
Analysis Batch: 146390

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 146311

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Arsenic	4.00	4.02		mg/L		101	80 - 120	0	20	
Barium	4.00	4.06		mg/L		101	80 - 120	0	20	
Cadmium	0.100	0.0927		mg/L		93	80 - 120	5	20	
Chromium	0.400	0.415		mg/L		104	80 - 120	0	20	
Lead	1.00	1.01		mg/L		101	80 - 120	0	20	

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Client Sample ID: DS-RB1-091813

Lab Sample ID: 580-40386-7

Date Collected: 09/18/13 16:40

Matrix: Water

Date Received: 09/20/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 18:45	JL1	TAL SEA
Total Recoverable	Prep	3005A			146311	10/01/13 18:36	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146390	10/02/13 13:34	FCW	TAL SEA

Client Sample ID: WFE-RB1-091913

Lab Sample ID: 580-40386-24

Date Collected: 09/19/13 15:24

Matrix: Water

Date Received: 09/20/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146396	10/02/13 14:25	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146590	10/04/13 22:51	JL1	TAL SEA
Total Recoverable	Prep	3005A			146311	10/01/13 18:36	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146390	10/02/13 13:38	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40386-7	DS-RB1-091813	Water	09/18/13 16:40	09/20/13 09:30
580-40386-24	WFE-RB1-091913	Water	09/19/13 15:24	09/20/13 09:30

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CHAIN OF CUSTODY

LABORATORY INFORMATION

Laboratory: **WASHINGTON**

Address: **SROKANE**

City/State/Zip: **TIPOD-NIO**

Project Manager: **HOWARD YOUNG**

Shipment Method: **HOWARD YOUNG**

Tracking Number: **40386**

LAB WORK ORDER: 40386

SHIPMENT INFORMATION

BNSF PROJECT INFORMATION

BNSF Project Number: **1396110.04**

BNSF Project Name: **YARKWATER**

BNSF Work Order No.: **TIPOD-NIO**

Company: **KENNEDY/LENKS CONSULTANTS**

Address: **32001 32ND AVES SUITE 100**

City/State/Zip: **FEDERALWAY WA 98007**

Project Manager: **HOWARD YOUNG**

Phone: **753-835-6400**

Email: **howardyoung@kennedylenks.com**

Fac: **253-997-3454**

TURNAROUND TIME

1-2 day Rush

5- to 8-day Rush

Standard 10-Day

3-day Rush

Other: **SEE COMMENT**

DELIVERABLES

BNSF Standard (Level II)

Level III

Level IV

Other Deliverables? **1/1 Custom EDD**

EDD Req. Format?

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	As, Cd, Ba, Pb, Total Cr by EPA 1620	As, Cr, B, Pb, DR NINTH-DX DIESEL OIL	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler								
1 DS-SW1-091813	1	9/18/13	1009	HN	N	G	S	X			1-DAY	1
2 DS-SW2-091813	1	9/18/13	1012	HY				X			1-DAY	2
3 DS-SW3-091813	1	9/18/13	1015	HY				X			1-DAY	3
4 DS-SW4-091813	1	9/18/13	1018	HY				X			1-DAY	4
5 DS-BS1-091813	1	9/18/13	1025	HY				X			1-DAY	5
6 DS-BS101-091813	1	9/18/13	1005	HY				X			1-DAY	6
7 DS-RB1-091813	3	9/18/13	1040	HY	N	G	W	X			STANDARD TAT	7
8 WFE-BS1-091913	1	9/19/13	0959	DL			S	X			2-DAY	8
9 WFE-SW1-091913	1	9/19/13	1003	DR				X			2-DAY	9
10 WFE-BS2-091913	1	9/19/13	1007	DL				X			2-DAY	10
11 WFE-BS3-091913	1	9/19/13	1010	DL				X			2-DAY	11
12 WFE-SW3-091913	1	9/19/13	1042	DL				X			2-DAY	12
13 WFE-SW2-091913	1	9/19/13	1048	DL				X			2-DAY	13
14 WFE-BS4-091913	1	9/19/13	1126	DR				X			2-DAY	14
15 WFE-BS5-091913	1	9/19/13	1134	DR				X			2-DAY	15

REINQUISHED BY: **DAVE R**

Date/Time: **9/19/13 1001**

Received By: **WAT SUDA**

Date/Time: **9/19/13 1605**

Comments and Special Analytical Requirements:

REINQUISHED BY: **WAT SUDA**

Date/Time: **9/19/13 16:20**

Received By: **WAT SUDA**

Date/Time: **9/20/13 9:30**

Lab Custody/Inact? Yes No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

580-40386 Chain of Custody

(06/05)



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 13916110.04
 Project State of Origin: WASHINGTON
 Project Site: SPOKANE
 Company: KENNEDY/JENKINS CONSULTANTS
 Address: 3201 32ND AVENUE SUITE 100
 City/State/Zip: FEDERAL WAY WA 98001
 Project Manager: HOWARD YOUNG
 Phone: 253-835-4400
 Fax: 253-952-3495
 Email: howard.young@kjaanalytcs.com

BNSF Project Name: RAILWATER
 BNSF Contract: BRUCE SHEPPARD
 BNSF Work Order No.: 110101 N10
 City/State/Zip: FEDERAL WAY WA 98001
 Project Manager: HOWARD YOUNG
 Phone: 253-835-4400
 Fax: 253-952-3495
 Email: howard.young@kjaanalytcs.com

TURNAROUND TIME: 45^Y 9/19/13
 DELIVERABLES: BNSF Standard (Level II)
 BNSF Standard (Level III)
 BNSF Standard (Level IV)
 Other: SEE COMMENTS
 EDD Req. Format?

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler					
1. WFE-BS105-091913	1	9/19/13	1130	DR	N	G S	AsCd, Ba, Pb, Total Cr by EPA 6020 NUTPH-OX DIESEL, OIL	2-04X	16
2. WFE-BS10-091913	1	9/19/13	1224					2-04X	17
3. WFE-SW4-091913	1	9/19/13	1230					2-04X	18
4. WFE-SW5-091913	1	9/19/13	1237					2-04X	19
5. WFE-SW6-091913	1	9/19/13	1454					2-04X	20
6. WFE-SW7-091913	1	9/19/13	1457					2-04X	21
7. WFE-BS7-091913	1	9/19/13	1447					2-04X	22
8. WFE-BS8-091913	1	9/19/13	1450					2-04X	23
9. WFE-RBI-091913	1	9/19/13	15:29					STANDARD TAT	24

11. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc hhhhhhh @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:01
 Received By: Matt Suda
 Date Time: 9/19/13 16:05

12. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc hhhhhhh @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:01
 Received By: Matt Suda
 Date Time: 9/19/13 16:05

13. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc hhhhhhh @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:01
 Received By: Matt Suda
 Date Time: 9/19/13 16:05

14. Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc hhhhhhh @ Lab
 WetPacks Packing bucket
 Date Time: 9/19/13 16:01
 Received By: Matt Suda
 Date Time: 9/19/13 16:05

Relinquished By: [Signature]
 Relinquished By: [Signature]
 Relinquished By: [Signature]
 Relinquished By: [Signature]
 Relinquished By: [Signature]
 Received by Laboratory: [Signature]
 Date Time: 9/19/13 16:20
 Lab Remarks: [Signature]
 Lab Custody Intact? Yes No
 Custody Seal No. [Signature]
 BNSF COC No. [Signature]

Login Container Summary Report

Unloaded onto cart in walk in.

Temperature readings: 4.6 °C @ 13:10, put away @ 13:15

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
DS-RB1-091813	580-40386-A-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-B-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-C-7	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
WFE-RB1-091913	580-40386-A-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-B-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-C-24	Plastic 125mL - Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40386-1

Login Number: 40386

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	not present
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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40386-3
Client Project/Site: Parkwater

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Vanessa Berry

Authorized for release by:
9/23/2013 3:33:29 PM
Vanessa Berry, Project Manager I
vanessa.frahs@testamericainc.com

Designee for
Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Job ID: 580-40386-3

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-40386-3

Comments

No additional comments.

Receipt

The samples were received on 9/20/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 6.0° C.

Except:

The following samples was activated for Metals analysis by the client on 9-22-2013.DS-RB1-091813 (580-40386-7). This analysis was not originally requested on the chain-of-custody (COC).

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.



Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-SW1-091813

Lab Sample ID: 580-40386-1

Date Collected: 09/18/13 16:09

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 90.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.43		mg/Kg	☼	09/20/13 13:49	09/23/13 09:53	10
Barium	110		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 09:53	10
Cadmium	ND		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 09:53	10
Chromium	14		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 09:53	10
Lead	17		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 09:53	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/20/13 17:55	1
Percent Moisture	9.3		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-SW2-091813

Lab Sample ID: 580-40386-2

Date Collected: 09/18/13 16:12

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 84.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.46		mg/Kg	✱	09/20/13 13:49	09/23/13 10:22	10
Barium	180		0.19		mg/Kg	✱	09/20/13 13:49	09/23/13 10:22	10
Cadmium	0.36		0.19		mg/Kg	✱	09/20/13 13:49	09/23/13 10:22	10
Chromium	16		0.19		mg/Kg	✱	09/20/13 13:49	09/23/13 10:22	10
Lead	110		0.19		mg/Kg	✱	09/20/13 13:49	09/23/13 10:22	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			09/20/13 17:55	1
Percent Moisture	15		0.10		%			09/20/13 17:55	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-SW3-091813

Lab Sample ID: 580-40386-3

Date Collected: 09/18/13 16:15

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 86.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.51		mg/Kg	☼	09/20/13 13:49	09/23/13 10:26	10
Barium	150		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 10:26	10
Cadmium	ND		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 10:26	10
Chromium	12		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 10:26	10
Lead	33		0.20		mg/Kg	☼	09/20/13 13:49	09/23/13 10:26	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/20/13 17:55	1
Percent Moisture	14		0.10		%			09/20/13 17:55	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-SW4-091813

Lab Sample ID: 580-40386-4

Date Collected: 09/18/13 16:18

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 93.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		0.41		mg/Kg	☼	09/20/13 13:49	09/23/13 10:30	10
Barium	67		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 10:30	10
Cadmium	ND		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 10:30	10
Chromium	9.5		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 10:30	10
Lead	9.5		0.17		mg/Kg	☼	09/20/13 13:49	09/23/13 10:30	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/20/13 17:55	1
Percent Moisture	7.0		0.10		%			09/20/13 17:55	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-BS1-091813

Lab Sample ID: 580-40386-5

Date Collected: 09/18/13 16:25

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 89.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.0		0.47		mg/Kg	☼	09/20/13 13:49	09/23/13 10:34	10
Barium	97		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 10:34	10
Cadmium	ND		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 10:34	10
Chromium	11		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 10:34	10
Lead	26		0.19		mg/Kg	☼	09/20/13 13:49	09/23/13 10:34	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/20/13 17:55	1
Percent Moisture	10		0.10		%			09/20/13 17:55	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-BS101-091813

Lab Sample ID: 580-40386-6

Date Collected: 09/18/13 16:25

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 91.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3		0.53		mg/Kg	☼	09/20/13 13:49	09/23/13 10:38	10
Barium	100		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 10:38	10
Cadmium	ND		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 10:38	10
Chromium	14		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 10:38	10
Lead	14		0.21		mg/Kg	☼	09/20/13 13:49	09/23/13 10:38	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/20/13 17:55	1
Percent Moisture	8.6		0.10		%			09/20/13 17:55	1



QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-145480/22-A
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145480

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Barium	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Cadmium	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Chromium	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10
Lead	ND		0.20		mg/Kg		09/20/13 13:49	09/23/13 09:36	10

Lab Sample ID: LCS 580-145480/23-A
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145480

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	200		mg/Kg		100	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.67		mg/Kg		93	80 - 120
Chromium	20.0	19.3		mg/Kg		97	80 - 120
Lead	50.0	48.7		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-145480/24-A
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145480

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	199		mg/Kg		99	80 - 120	1	20
Barium	200	194		mg/Kg		97	80 - 120	0	20
Cadmium	5.00	4.53		mg/Kg		91	80 - 120	3	20
Chromium	20.0	19.3		mg/Kg		96	80 - 120	0	20
Lead	50.0	48.2		mg/Kg		96	80 - 120	1	20

Lab Sample ID: 580-40386-1 MS
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: DS-SW1-091813
Prep Type: Total/NA
Prep Batch: 145480

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	8.2		182	195		mg/Kg	✱	102	80 - 120
Barium	110		182	260		mg/Kg	✱	84	80 - 120
Cadmium	ND		4.55	4.27		mg/Kg	✱	92	80 - 120
Chromium	14		18.2	29.8		mg/Kg	✱	86	80 - 120
Lead	17		45.5	59.4		mg/Kg	✱	93	80 - 120

Lab Sample ID: 580-40386-1 MSD
Matrix: Solid
Analysis Batch: 145580

Client Sample ID: DS-SW1-091813
Prep Type: Total/NA
Prep Batch: 145480

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	8.2		191	209		mg/Kg	✱	105	80 - 120	7	20
Barium	110		191	302		mg/Kg	✱	102	80 - 120	15	20
Cadmium	ND		4.77	4.81		mg/Kg	✱	99	80 - 120	12	20
Chromium	14		19.1	34.0		mg/Kg	✱	104	80 - 120	13	20
Lead	17		47.7	66.9		mg/Kg	✱	105	80 - 120	12	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40386-1 DU

Matrix: Solid

Analysis Batch: 145580

Client Sample ID: DS-SW1-091813

Prep Type: Total/NA

Prep Batch: 145480

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier				Limit	
Arsenic	8.2		8.73		mg/Kg	☼		7	20
Barium	110		113		mg/Kg	☼		5	20
Cadmium	ND		ND		mg/Kg	☼		NC	20
Chromium	14		15.1		mg/Kg	☼		6	20
Lead	17		18.1		mg/Kg	☼		6	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40386-1 DU

Matrix: Solid

Analysis Batch: 145498

Client Sample ID: DS-SW1-091813

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier				Limit	
Percent Solids	91		92		%			1	20
Percent Moisture	9.3		8.2		%			12	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-SW1-091813

Lab Sample ID: 580-40386-1

Date Collected: 09/18/13 16:09

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 09:53	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: DS-SW2-091813

Lab Sample ID: 580-40386-2

Date Collected: 09/18/13 16:12

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:22	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: DS-SW3-091813

Lab Sample ID: 580-40386-3

Date Collected: 09/18/13 16:15

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:26	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: DS-SW4-091813

Lab Sample ID: 580-40386-4

Date Collected: 09/18/13 16:18

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:30	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Client Sample ID: DS-BS1-091813

Lab Sample ID: 580-40386-5

Date Collected: 09/18/13 16:25

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:34	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Client Sample ID: DS-BS101-091813

Lab Sample ID: 580-40386-6

Date Collected: 09/18/13 16:25

Matrix: Solid

Date Received: 09/20/13 09:30

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145480	09/20/13 13:49	PAB	TAL SEA
Total/NA	Analysis	6020		10	145580	09/23/13 10:38	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145498	09/20/13 17:55	PAB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40386-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40386-1	DS-SW1-091813	Solid	09/18/13 16:09	09/20/13 09:30
580-40386-2	DS-SW2-091813	Solid	09/18/13 16:12	09/20/13 09:30
580-40386-3	DS-SW3-091813	Solid	09/18/13 16:15	09/20/13 09:30
580-40386-4	DS-SW4-091813	Solid	09/18/13 16:18	09/20/13 09:30
580-40386-5	DS-BS1-091813	Solid	09/18/13 16:25	09/20/13 09:30
580-40386-6	DS-BS101-091813	Solid	09/18/13 16:25	09/20/13 09:30





LABORATORY INFORMATION
 Laboratory: [Blank] Project Manager: [Blank]
 Address: [Blank] Phone: [Blank]
 City/State/Zip: [Blank] Fax: [Blank]

CHAIN OF CUSTODY
 Project State of Origin: WASHINGTON
 Project City: SPOKANE
 Project Number: [Blank]

BNSF PROJECT INFORMATION
 BNSF Project Number: 1396110.04
 BNSF Project Name: PARKWATER
 BNSF Work Order No.: T10101-N10
 Company: KENNEDY/JENKS CONSULTANTS
 Address: 32001 32ND AVENUE SUITE 100
 City/State/Zip: FEDERALWAY WA 98007
 Project Manager: HOWARD YOUNG
 Email: howardyoung@kennedyjenks.com
 Phone: 753-835-6400
 Fax: 253-997-3454

TURNAROUND TIME
 1-2 day Rush
 3-5 day Rush
 5- to 8-day Rush
 Standard 10-Day
 Other SEE COMMENT

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables? 1/1 Custom EDD
 EDD Req. Format?

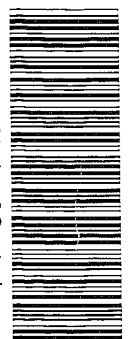
SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	As, Cd, Ba, Pb, Total Cr by EPA 1620 As, Cr, Ba, Pb, DR NINTH-DX DIESEL OIL	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler							
1 DS-SW1-091813	1	9/18/13	1009	HN	N	G	S	X		1-DAY	1
2 DS-SW2-091813	1	9/18/13	1012	HY				X		1-DAY	2
3 DS-SW3-091813	1	9/18/13	1015	HY				X		1-DAY	3
4 DS-SW4-091813	1	9/18/13	1018	HY				X		1-DAY	4
5 DS-BS1-091813	1	9/18/13	1025	HY				X		1-DAY	5
6 DS-BS101-091813	1	9/18/13	1005	HY				X		1-DAY	6
7 DS-RB1-091813	3	9/18/13	1040	HY	N	G	W	X		STANDARD TAT	7
8 WFE-BS1-091913	1	9/19/13	0959	DL			S	X		2-DAY	8
9 WFE-SW1-091913	1	9/19/13	1003	DR				X		2-DAY	9
10 WFE-BS2-091913	1	9/19/13	1007	DL				X		2-DAY	10
11 WFE-BS3-091913	1	9/19/13	1010	DL				X		2-DAY	11
12 WFE-SW3-091913	1	9/19/13	1042	DL				X		2-DAY	12
13 WFE-SW2-091913	1	9/19/13	1048	DL				X		2-DAY	13
14 WFE-BS4-091913	1	9/19/13	1126	DR				X		2-DAY	14
15 WFE-BS5-091913	1	9/19/13	1134	DR				X		2-DAY	15

REQUISITION INFORMATION
 Requisitioned By: [Blank] Date/Time: 9/19/13 16:01
 Received By: [Blank] Date/Time: 9/19/13 16:05
 Requisitioned By: [Blank] Date/Time: 9/19/13 16:20
 Received By: [Blank] Date/Time: 9/20/13 9:30

RECEIPT INFORMATION
 Received by Laboratory: [Blank] Date/Time: [Blank]
 Received by: [Blank] Lab Remarks: [Blank]
 Lab Custody/Inact? Yes No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
 DUPLICATE - CONSULTANT



580-40386 Chain of Custody



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 13916110.04
 BNSF Project Name: RUCKWATER
 BNSF Work Order No.: 110101 N10
 Project State of Origin: WASHINGTON
 City/State/Zip: SPOKANE

CONSULTANT INFORMATION

Company: KENNEDY/JENKINS CONSULTANTS
 Address: 3201 32ND AVENUE SUITE 100
 City/State/Zip: FEDERAL WAY WA 98001
 Project Manager: HOWARD YOUNG
 Phone: 253-835-4400
 Fax: 253-952-3495
 Email: howard.young@kjconsultants.com

LABORATORY INFORMATION

Laboratory: [Blank]
 Address: [Blank]
 City/State/Zip: [Blank]
 Project Manager: [Blank]
 Phone: [Blank]
 Fax: [Blank]

SHIPMENT INFORMATION

Shipment Method: [Blank]
 Tracking Number: [Blank]
 Project Number: [Blank]

DELIVERABLES

TURNAROUND TIME
 1-2 day Rush
 2-4 day Rush
 5- to 8-day Rush
 Standard 10-Day
 Other: SEE COMMENTS
 Level II
 Level III
 Level IV

OTHER DELIVERABLES?

Other Deliverables?
 EDD Req. Format?

METHODS FOR ANALYSIS

AsCd, Ba, Pb, Total Cr
 by EPA 6020
 NUTPH-OX
 DIESEL, OIL

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type Matrix	Comments	LAB USE
		Date	Time	Sampler				
1. WFE-BS105-091913	1	9/19/13	1130	DR	N	G S	X	2-04X 16
2. WFE-BS10-091913	1	9/19/13	1224				X	2-04X 17
3. WFE-SW4-091913	1	9/19/13	1230				X	2-04X 18
4. WFE-SW5-091913	1	9/19/13	1237				X	2-04X 19
5. WFE-SW6-091913	1	9/19/13	1454				X	2-04X 20
6. WFE-SW7-091913	1	9/19/13	1457				X	2-04X 21
7. WFE-BS7-091913	1	9/19/13	1447				X	2-04X 22
8. WFE-BS8-091913	1	9/19/13	1450				X	2-04X 23
9. WFE-RBI-091913	1	9/19/13	15:29				X	2-04X 24

Cooler/TB DigIR cor 2.5 unc
 Cooler Dsc hhhhhhh @ Lab
 WetPacks Packing bubble
 2/13 Filter Pad

Cooler/TB DigIR cor 2.0 unc
 Cooler Dsc hhhhhhh @ Lab
 WetPacks Packing bubble
 10/13 Filter Pad

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Comments and Special Analytical Requirements:
[Signature]	9/19/13 16:01	Watt Suda	9/19/13 16:05	[Signature]	9/19/13 16:20	[Signature]	9/19/13 9:30	89C

Login Container Summary Report

Unloaded onto cart in walk in.

Temperature readings: 4.6 °C @ 13:10, put away @ 13:15

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
DS-RB1-091813	580-40386-A-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-B-7	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
DS-RB1-091813	580-40386-C-7	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
WFE-RB1-091913	580-40386-A-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-B-24	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
WFE-RB1-091913	580-40386-C-24	Plastic 125mL - Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40386-3

Login Number: 40386

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40538-1
Client Project/Site: Parkwater RA
Revision: 1

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
11/19/2013 4:26:48 PM

Kristine Allen, Manager of Project Management
(253)922-2310
kristine.allen@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Job ID: 580-40538-1

Laboratory: TestAmerica Seattle

Narrative

Comments

Revised Report 11/18/13 - For samples DS-RB1-092413 (580-40538-5), WFE-RB1-092513 (580-40538-25) and WFE-RB1-092613 (580-40538-34), it was found that the initial calibration was incorrectly processed, where the retention time marker standard had the incorrect peak for n-Decane (nC10) identified. This caused the #2 Diesel (nC10-C24) range to integrate more area than normal, thereby causing a higher bias in this range for all samples. The initial calibration was fixed, and all subsequent samples were reprocessed.

Also a detection of #2 Diesel Fuel (C10-C24) was originally reported in the method blank, after the correction the method blank was non-detect for the affected range.

Receipt

The samples were received on 9/27/2013 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.4° C and 5.6° C.

Except:

Sample # DS-SW7-092413 was dropped during unloading from the cooler and broke. Sample glass was disposed of and the sample itself was swept up and placed in a one gallon zip lock baggie. Sample was taken from the zip lock baggie and analyzed per client request.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146589, the method blank for preparation batch 146444 contained Motor Oil (>C24-C36) above the reporting limit (RL). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

In analytical batch 146589, for the following sample(s) from preparation batch 146444: DS-RB1-092413 (580-40538-5), WFE-RB1-092513 (580-40538-25), WFE-RB1-092613 (580-40538-34), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Metals - Method(s) 6020

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 146090 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW5-092413

Lab Sample ID: 580-40538-1

Date Collected: 09/24/13 17:35

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 73.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	40		0.62		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Barium	430		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Cadmium	6.5		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Chromium	38		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10
Lead	1500		0.25		mg/Kg	☼	09/29/13 14:48	09/30/13 12:28	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/29/13 16:06	1
Percent Moisture	27		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW6-092413

Lab Sample ID: 580-40538-2

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 68.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		0.68		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Barium	520		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Cadmium	0.74		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Chromium	36		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10
Lead	2000		0.27		mg/Kg	☼	09/29/13 14:48	09/30/13 12:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68		0.10		%			09/29/13 16:06	1
Percent Moisture	32		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW7-092413

Lab Sample ID: 580-40538-3

Date Collected: 09/24/13 18:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 96.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.30		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Barium	62		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Cadmium	ND		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Chromium	10		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10
Lead	15		0.12		mg/Kg	☼	09/29/13 14:48	09/30/13 11:59	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10		%			09/29/13 16:06	1
Percent Moisture	3.6		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW106-092413

Lab Sample ID: 580-40538-4

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		0.68		mg/Kg	✱	09/29/13 14:48	09/30/13 12:32	10
Barium	440		0.27		mg/Kg	✱	09/29/13 14:48	09/30/13 12:32	10
Cadmium	0.61		0.27		mg/Kg	✱	09/29/13 14:48	09/30/13 12:32	10
Chromium	38		0.27		mg/Kg	✱	09/29/13 14:48	09/30/13 12:32	10
Lead	1000		0.27		mg/Kg	✱	09/29/13 14:48	09/30/13 12:32	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	71		0.10		%			09/29/13 16:06	1
Percent Moisture	29		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-RB1-092413

Lab Sample ID: 580-40538-5

Date Collected: 09/24/13 18:15

Matrix: Water

Date Received: 09/27/13 09:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/03/13 09:27	10/04/13 14:50	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/03/13 09:27	10/04/13 14:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	71		50 - 150				10/03/13 09:27	10/04/13 14:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/27/13 17:49	09/30/13 10:40	5
Barium	ND		0.0060		mg/L		09/27/13 17:49	09/30/13 10:40	5
Cadmium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:40	5
Chromium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:40	5
Lead	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:40	5

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW11-092513

Lab Sample ID: 580-40538-6

Date Collected: 09/25/13 13:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.8		0.45		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Barium	130		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Cadmium	1.4		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Chromium	13		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10
Lead	130		0.18		mg/Kg	☼	09/29/13 14:48	09/30/13 12:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:06	1
Percent Moisture	12		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW12-092513

Lab Sample ID: 580-40538-7

Date Collected: 09/25/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 74.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	34		0.49		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Barium	740		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Cadmium	24		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Chromium	20		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:52	10
Lead	36000		20		mg/Kg	☼	09/29/13 14:48	09/30/13 13:21	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10		%			09/29/13 16:06	1
Percent Moisture	26		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW13-092513

Lab Sample ID: 580-40538-8

Date Collected: 09/25/13 16:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.55		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Barium	320		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Cadmium	ND		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Chromium	18		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10
Lead	17		0.22		mg/Kg	☼	09/29/13 14:48	09/30/13 12:08	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/29/13 16:06	1
Percent Moisture	14		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW14-092513

Lab Sample ID: 580-40538-9

Date Collected: 09/25/13 17:15

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 75.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	34		0.58		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Barium	380		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Cadmium	8.3		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Chromium	44		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10
Lead	2500		0.23		mg/Kg	☼	09/29/13 14:48	09/30/13 12:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10		%			09/29/13 16:06	1
Percent Moisture	25		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW15-092513

Lab Sample ID: 580-40538-10

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 65.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		0.71		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Barium	390		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Cadmium	9.0		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Chromium	27		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10
Lead	2900		0.29		mg/Kg	☼	09/29/13 14:48	09/30/13 13:00	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	65		0.10		%			09/29/13 16:06	1
Percent Moisture	35		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW115-092513

Lab Sample ID: 580-40538-11

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 72.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		0.48		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Barium	390		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Cadmium	3.4		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Chromium	19		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10
Lead	1800		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 13:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/29/13 16:06	1
Percent Moisture	27		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW16-092513

Lab Sample ID: 580-40538-12

Date Collected: 09/25/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	63		0.59		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Barium	510		0.23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Cadmium	10		0.23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Chromium	35		0.23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:08	10
Lead	7500		23		mg/Kg	✱	09/29/13 14:48	09/30/13 13:25	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	72		0.10		%			09/29/13 16:06	1
Percent Moisture	28		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW17-092613

Lab Sample ID: 580-40538-13

Date Collected: 09/26/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 79.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	52		0.59		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Barium	570		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Cadmium	1.6		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Chromium	17		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10
Lead	1000		0.24		mg/Kg	☼	09/29/13 14:48	09/30/13 13:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10		%			09/29/13 16:06	1
Percent Moisture	21		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW18-092613

Lab Sample ID: 580-40538-14

Date Collected: 09/26/13 13:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 84.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	48		0.51		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Barium	470		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Cadmium	7.7		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Chromium	33		0.20		mg/Kg	☼	09/29/13 14:48	09/30/13 12:24	10
Lead	8300		20		mg/Kg	☼	09/29/13 14:48	09/30/13 13:17	1000

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/29/13 16:06	1
Percent Moisture	16		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW19-092613

Lab Sample ID: 580-40538-15

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 93.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		0.48		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Barium	150		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Cadmium	3.5		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Chromium	19		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10
Lead	210		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/29/13 16:06	1
Percent Moisture	6.9		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW119-092613

Lab Sample ID: 580-40538-16

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 92.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.34		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Barium	140		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Cadmium	2.6		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Chromium	17		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10
Lead	150		0.14		mg/Kg	☼	09/29/13 14:48	09/30/13 12:20	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/29/13 16:06	1
Percent Moisture	7.2		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS15-092513

Lab Sample ID: 580-40538-17

Date Collected: 09/25/13 14:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.48		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Barium	88		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Cadmium	ND		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Chromium	20		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10
Lead	21		0.19		mg/Kg	☼	09/29/13 14:48	09/30/13 12:16	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS16-092513

Lab Sample ID: 580-40538-18

Date Collected: 09/25/13 14:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3		0.44		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Barium	52		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Cadmium	ND		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Chromium	13		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10
Lead	11		0.18		mg/Kg	☼	09/29/13 15:41	09/30/13 19:09	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			09/29/13 16:06	1
Percent Moisture	8.4		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS17-092513

Lab Sample ID: 580-40538-19

Date Collected: 09/25/13 14:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		0.35		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Barium	84		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Cadmium	ND		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Chromium	15		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10
Lead	12		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/29/13 16:06	1
Percent Moisture	11		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS18-092513

Lab Sample ID: 580-40538-20

Date Collected: 09/25/13 15:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		0.40		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Barium	110		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Cadmium	ND		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Chromium	14		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10
Lead	12		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:46	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS19-092513

Lab Sample ID: 580-40538-21

Date Collected: 09/25/13 16:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.0		0.53		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Barium	130		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Cadmium	ND		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Chromium	18		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10
Lead	13		0.21		mg/Kg	☼	09/29/13 15:41	09/30/13 19:50	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS20-092513

Lab Sample ID: 580-40538-22

Date Collected: 09/25/13 16:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.40		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Barium	110		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Cadmium	ND		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Chromium	14		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10
Lead	11		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 19:54	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:06	1
Percent Moisture	12		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS21-092513

Lab Sample ID: 580-40538-23

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.35		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Barium	220		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Cadmium	1.3		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Chromium	17		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10
Lead	1100		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 19:58	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS121-092513

Lab Sample ID: 580-40538-24

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.57		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Barium	300		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Cadmium	1.5		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Chromium	20		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10
Lead	1400		0.23		mg/Kg	✱	09/29/13 15:41	09/30/13 20:02	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:06	1
Percent Moisture	13		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-RB1-092513

Lab Sample ID: 580-40538-25

Date Collected: 09/25/13 17:58

Matrix: Water

Date Received: 09/27/13 09:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	Y	0.12		mg/L		10/03/13 09:27	10/04/13 15:08	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/03/13 09:27	10/04/13 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	74		50 - 150				10/03/13 09:27	10/04/13 15:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/27/13 17:49	09/30/13 10:45	5
Barium	ND		0.0060		mg/L		09/27/13 17:49	09/30/13 10:45	5
Cadmium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:45	5
Chromium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:45	5
Lead	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:45	5

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS22-092613

Lab Sample ID: 580-40538-26

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 90.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	15		0.48		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Barium	110		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Cadmium	0.96		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Chromium	9.4		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10
Lead	440		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:06	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/29/13 16:06	1
Percent Moisture	9.4		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS23-092613

Lab Sample ID: 580-40538-27

Date Collected: 09/26/13 12:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.0		0.38		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Barium	190		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Cadmium	0.55		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Chromium	11		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10
Lead	490		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:11	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/29/13 16:06	1
Percent Moisture	11		0.10		%			09/29/13 16:06	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS24-092613

Lab Sample ID: 580-40538-28

Date Collected: 09/26/13 12:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.3		0.41		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Barium	220		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Cadmium	0.37		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Chromium	17		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10
Lead	240		0.16		mg/Kg	☼	09/29/13 15:41	09/30/13 20:15	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/29/13 16:06	1
Percent Moisture	11		0.10		%			09/29/13 16:06	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS25-092613

Lab Sample ID: 580-40538-29

Date Collected: 09/26/13 12:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.38		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Barium	120		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Cadmium	ND		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Chromium	15		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10
Lead	18		0.15		mg/Kg	☼	09/29/13 15:41	09/30/13 20:31	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:11	1
Percent Moisture	12		0.10		%			09/29/13 16:11	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS26-092613

Lab Sample ID: 580-40538-30

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.35		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Barium	120		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Cadmium	ND		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Chromium	18		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10
Lead	14		0.14		mg/Kg	☼	09/29/13 15:41	09/30/13 20:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/29/13 16:11	1
Percent Moisture	9.0		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS126-092613

Lab Sample ID: 580-40538-31

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		0.49		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Barium	100		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Cadmium	ND		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Chromium	15		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10
Lead	12		0.19		mg/Kg	✱	09/29/13 15:41	09/30/13 20:39	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/29/13 16:11	1
Percent Moisture	10		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS27-092613

Lab Sample ID: 580-40538-32

Date Collected: 09/26/13 12:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.6		0.43		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Barium	130		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Cadmium	ND		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Chromium	16		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10
Lead	52		0.17		mg/Kg	☼	09/29/13 15:41	09/30/13 20:43	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			09/29/13 16:11	1
Percent Moisture	13		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS28-092613

Lab Sample ID: 580-40538-33

Date Collected: 09/26/13 12:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.9		0.46		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Barium	130		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Cadmium	1.4		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Chromium	17		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10
Lead	180		0.19		mg/Kg	☼	09/29/13 15:41	09/30/13 20:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/29/13 16:11	1
Percent Moisture	12		0.10		%			09/29/13 16:11	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-RB1-092613

Lab Sample ID: 580-40538-34

Date Collected: 09/26/13 12:52

Matrix: Water

Date Received: 09/27/13 09:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	Y	0.12		mg/L		10/03/13 09:27	10/04/13 15:26	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/03/13 09:27	10/04/13 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	75		50 - 150				10/03/13 09:27	10/04/13 15:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/27/13 17:49	09/30/13 10:49	5
Barium	ND		0.0060		mg/L		09/27/13 17:49	09/30/13 10:49	5
Cadmium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:49	5
Chromium	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:49	5
Lead	ND		0.0020		mg/L		09/27/13 17:49	09/30/13 10:49	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146444/1-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/03/13 09:27	10/04/13 13:56	1
Motor Oil (>C24-C36)	0.300		0.25		mg/L		10/03/13 09:27	10/04/13 13:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150	10/03/13 09:27	10/04/13 13:56	1

Lab Sample ID: LCS 580-146444/2-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.28		mg/L		82	70 - 140
Motor Oil (>C24-C36)	4.00	3.77		mg/L		94	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	86		50 - 150

Lab Sample ID: LCSD 580-146444/3-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.22		mg/L		80	70 - 140	2	27
Motor Oil (>C24-C36)	4.00	3.78		mg/L		95	66 - 125	0	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	85		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146090/22-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146090

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.10		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Barium	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Cadmium	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Chromium	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2
Lead	ND		0.040		mg/Kg		09/29/13 14:48	09/30/13 11:10	2

Lab Sample ID: LCS 580-146090/23-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	195		mg/Kg		98	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-146090/23-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.21		mg/Kg		84	80 - 120
Chromium	20.0	20.5		mg/Kg		102	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 580-146090/24-A
Matrix: Solid
Analysis Batch: 146157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146090

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	195		mg/Kg		97	80 - 120	0	20
Barium	200	193		mg/Kg		96	80 - 120	1	20
Cadmium	5.00	4.36		mg/Kg		87	80 - 120	3	20
Chromium	20.0	20.9		mg/Kg		105	80 - 120	2	20
Lead	50.0	49.7		mg/Kg		99	80 - 120	1	20

Lab Sample ID: MB 580-146094/19-A
Matrix: Solid
Analysis Batch: 146200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Barium	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Cadmium	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Chromium	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10
Lead	ND		0.20		mg/Kg		09/29/13 15:41	09/30/13 15:09	10

Lab Sample ID: LCS 580-146094/20-A
Matrix: Solid
Analysis Batch: 146200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	197		mg/Kg		98	80 - 120
Barium	200	188		mg/Kg		94	80 - 120
Cadmium	5.00	4.27		mg/Kg		85	80 - 120
Chromium	20.0	20.6		mg/Kg		103	80 - 120
Lead	50.0	49.5		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 580-146094/21-A
Matrix: Solid
Analysis Batch: 146200

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146094

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	197		mg/Kg		98	80 - 120	0	20
Barium	200	191		mg/Kg		96	80 - 120	2	20
Cadmium	5.00	4.40		mg/Kg		88	80 - 120	3	20
Chromium	20.0	20.6		mg/Kg		103	80 - 120	0	20
Lead	50.0	49.3		mg/Kg		99	80 - 120	0	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40538-18 MS

Matrix: Solid

Analysis Batch: 146200

Client Sample ID: WFE-BS16-092513

Prep Type: Total/NA

Prep Batch: 146094

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Arsenic	6.3		179	183		mg/Kg	☼	99	80 - 120	
Barium	52		179	234		mg/Kg	☼	102	80 - 120	
Cadmium	ND		4.48	4.20		mg/Kg	☼	92	80 - 120	
Chromium	13		17.9	31.1		mg/Kg	☼	100	80 - 120	
Lead	11		44.8	54.4		mg/Kg	☼	97	80 - 120	

Lab Sample ID: 580-40538-18 MSD

Matrix: Solid

Analysis Batch: 146200

Client Sample ID: WFE-BS16-092513

Prep Type: Total/NA

Prep Batch: 146094

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits	RPD	Limit	
Arsenic	6.3		180	189		mg/Kg	☼	101	80 - 120	3	20	20	
Barium	52		180	236		mg/Kg	☼	103	80 - 120	1	20	20	
Cadmium	ND		4.50	4.11		mg/Kg	☼	90	80 - 120	2	20	20	
Chromium	13		18.0	33.6		mg/Kg	☼	114	80 - 120	8	20	20	
Lead	11		45.0	58.0		mg/Kg	☼	104	80 - 120	6	20	20	

Lab Sample ID: 580-40538-18 DU

Matrix: Solid

Analysis Batch: 146200

Client Sample ID: WFE-BS16-092513

Prep Type: Total/NA

Prep Batch: 146094

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	6.3		6.40		mg/Kg	☼	1	20
Barium	52		52.5		mg/Kg	☼	2	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	13		13.1		mg/Kg	☼	0.2	20
Lead	11		11.2		mg/Kg	☼	0.9	20

Lab Sample ID: MB 580-146030/16-A

Matrix: Water

Analysis Batch: 146157

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 146030

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		09/27/13 17:51	09/30/13 09:34	1
Barium	ND		0.0012		mg/L		09/27/13 17:51	09/30/13 09:34	1
Cadmium	ND		0.00040		mg/L		09/27/13 17:51	09/30/13 09:34	1
Chromium	ND		0.00040		mg/L		09/27/13 17:51	09/30/13 09:34	1
Lead	ND		0.00040		mg/L		09/27/13 17:51	09/30/13 09:34	1

Lab Sample ID: LCS 580-146030/17-A

Matrix: Water

Analysis Batch: 146157

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 146030

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
	Added	Result	Qualifier				Limits	Limits
Arsenic	4.00	3.88		mg/L		97	80 - 120	
Barium	4.00	3.78		mg/L		94	80 - 120	
Cadmium	0.100	0.0886		mg/L		89	80 - 120	
Chromium	0.400	0.410		mg/L		102	80 - 120	
Lead	1.00	0.997		mg/L		100	80 - 120	

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-146030/18-A
Matrix: Water
Analysis Batch: 146157

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 146030

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	3.93		mg/L		98	80 - 120	1	20
Barium	4.00	3.84		mg/L		96	80 - 120	2	20
Cadmium	0.100	0.0912		mg/L		91	80 - 120	3	20
Chromium	0.400	0.408		mg/L		102	80 - 120	0	20
Lead	1.00	0.983		mg/L		98	80 - 120	1	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40538-18 DU
Matrix: Solid
Analysis Batch: 146095

Client Sample ID: WFE-BS16-092513
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	92		92		%		0.6	20
Percent Moisture	8.4		7.8		%		6	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: DS-SW5-092413

Lab Sample ID: 580-40538-1

Date Collected: 09/24/13 17:35

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 73.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:28	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-SW6-092413

Lab Sample ID: 580-40538-2

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 68.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-SW7-092413

Lab Sample ID: 580-40538-3

Date Collected: 09/24/13 18:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 11:59	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-SW106-092413

Lab Sample ID: 580-40538-4

Date Collected: 09/24/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:32	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: DS-RB1-092413

Lab Sample ID: 580-40538-5

Date Collected: 09/24/13 18:15

Matrix: Water

Date Received: 09/27/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146589	10/04/13 14:50	JL1	TAL SEA
Total Recoverable	Prep	3005A			146030	09/27/13 17:49	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146157	09/30/13 10:40	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW11-092513

Lab Sample ID: 580-40538-6

Date Collected: 09/25/13 13:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW12-092513

Lab Sample ID: 580-40538-7

Date Collected: 09/25/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:52	FCW	TAL SEA
Total/NA	Analysis	6020		1000	146157	09/30/13 13:21	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW13-092513

Lab Sample ID: 580-40538-8

Date Collected: 09/25/13 16:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:08	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW14-092513

Lab Sample ID: 580-40538-9

Date Collected: 09/25/13 17:15

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:56	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW15-092513

Lab Sample ID: 580-40538-10

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 65.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 13:00	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW115-092513

Lab Sample ID: 580-40538-11

Date Collected: 09/25/13 17:25

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 72.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 13:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW16-092513

Lab Sample ID: 580-40538-12

Date Collected: 09/25/13 17:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 71.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	146157	09/30/13 13:08	FCW	TAL SEA
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		1000	146157	09/30/13 13:25	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW17-092613

Lab Sample ID: 580-40538-13

Date Collected: 09/26/13 13:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 13:12	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW18-092613

Lab Sample ID: 580-40538-14

Date Collected: 09/26/13 13:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:24	FCW	TAL SEA
Total/NA	Analysis	6020		1000	146157	09/30/13 13:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-SW19-092613

Lab Sample ID: 580-40538-15

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:12	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-SW119-092613

Lab Sample ID: 580-40538-16

Date Collected: 09/26/13 13:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:20	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS15-092513

Lab Sample ID: 580-40538-17

Date Collected: 09/25/13 14:45

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146090	09/29/13 14:48	PAB	TAL SEA
Total/NA	Analysis	6020		10	146157	09/30/13 12:16	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS16-092513

Lab Sample ID: 580-40538-18

Date Collected: 09/25/13 14:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:09	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS17-092513

Lab Sample ID: 580-40538-19

Date Collected: 09/25/13 14:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:42	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS18-092513

Lab Sample ID: 580-40538-20

Date Collected: 09/25/13 15:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:46	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS19-092513

Lab Sample ID: 580-40538-21

Date Collected: 09/25/13 16:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:50	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS20-092513

Lab Sample ID: 580-40538-22

Date Collected: 09/25/13 16:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:54	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS21-092513

Lab Sample ID: 580-40538-23

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 19:58	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS121-092513

Lab Sample ID: 580-40538-24

Date Collected: 09/25/13 17:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:02	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-RB1-092513

Lab Sample ID: 580-40538-25

Date Collected: 09/25/13 17:58

Matrix: Water

Date Received: 09/27/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146589	10/04/13 15:08	JL1	TAL SEA
Total Recoverable	Prep	3005A			146030	09/27/13 17:49	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146157	09/30/13 10:45	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS22-092613

Lab Sample ID: 580-40538-26

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:06	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS23-092613

Lab Sample ID: 580-40538-27

Date Collected: 09/26/13 12:10

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:11	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS24-092613

Lab Sample ID: 580-40538-28

Date Collected: 09/26/13 12:20

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:15	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:06	PAB	TAL SEA

Client Sample ID: WFE-BS25-092613

Lab Sample ID: 580-40538-29

Date Collected: 09/26/13 12:30

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:31	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-BS26-092613

Lab Sample ID: 580-40538-30

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Client Sample ID: WFE-BS126-092613

Lab Sample ID: 580-40538-31

Date Collected: 09/26/13 12:40

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:39	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-BS27-092613

Lab Sample ID: 580-40538-32

Date Collected: 09/26/13 12:50

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:43	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-BS28-092613

Lab Sample ID: 580-40538-33

Date Collected: 09/26/13 12:55

Matrix: Solid

Date Received: 09/27/13 09:45

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146094	09/29/13 15:41	PAB	TAL SEA
Total/NA	Analysis	6020		10	146200	09/30/13 20:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146095	09/29/13 16:11	PAB	TAL SEA

Client Sample ID: WFE-RB1-092613

Lab Sample ID: 580-40538-34

Date Collected: 09/26/13 12:52

Matrix: Water

Date Received: 09/27/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146589	10/04/13 15:26	JL1	TAL SEA
Total Recoverable	Prep	3005A			146030	09/27/13 17:49	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146157	09/30/13 10:49	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40538-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40538-1	DS-SW5-092413	Solid	09/24/13 17:35	09/27/13 09:45
580-40538-2	DS-SW6-092413	Solid	09/24/13 17:50	09/27/13 09:45
580-40538-3	DS-SW7-092413	Solid	09/24/13 18:10	09/27/13 09:45
580-40538-4	DS-SW106-092413	Solid	09/24/13 17:50	09/27/13 09:45
580-40538-5	DS-RB1-092413	Water	09/24/13 18:15	09/27/13 09:45
580-40538-6	WFE-SW11-092513	Solid	09/25/13 13:10	09/27/13 09:45
580-40538-7	WFE-SW12-092513	Solid	09/25/13 13:20	09/27/13 09:45
580-40538-8	WFE-SW13-092513	Solid	09/25/13 16:45	09/27/13 09:45
580-40538-9	WFE-SW14-092513	Solid	09/25/13 17:15	09/27/13 09:45
580-40538-10	WFE-SW15-092513	Solid	09/25/13 17:25	09/27/13 09:45
580-40538-11	WFE-SW115-092513	Solid	09/25/13 17:25	09/27/13 09:45
580-40538-12	WFE-SW16-092513	Solid	09/25/13 17:50	09/27/13 09:45
580-40538-13	WFE-SW17-092613	Solid	09/26/13 13:20	09/27/13 09:45
580-40538-14	WFE-SW18-092613	Solid	09/26/13 13:30	09/27/13 09:45
580-40538-15	WFE-SW19-092613	Solid	09/26/13 13:40	09/27/13 09:45
580-40538-16	WFE-SW119-092613	Solid	09/26/13 13:40	09/27/13 09:45
580-40538-17	WFE-BS15-092513	Solid	09/25/13 14:45	09/27/13 09:45
580-40538-18	WFE-BS16-092513	Solid	09/25/13 14:50	09/27/13 09:45
580-40538-19	WFE-BS17-092513	Solid	09/25/13 14:55	09/27/13 09:45
580-40538-20	WFE-BS18-092513	Solid	09/25/13 15:40	09/27/13 09:45
580-40538-21	WFE-BS19-092513	Solid	09/25/13 16:00	09/27/13 09:45
580-40538-22	WFE-BS20-092513	Solid	09/25/13 16:30	09/27/13 09:45
580-40538-23	WFE-BS21-092513	Solid	09/25/13 17:40	09/27/13 09:45
580-40538-24	WFE-BS121-092513	Solid	09/25/13 17:40	09/27/13 09:45
580-40538-25	WFE-RB1-092513	Water	09/25/13 17:58	09/27/13 09:45
580-40538-26	WFE-BS22-092613	Solid	09/26/13 12:00	09/27/13 09:45
580-40538-27	WFE-BS23-092613	Solid	09/26/13 12:10	09/27/13 09:45
580-40538-28	WFE-BS24-092613	Solid	09/26/13 12:20	09/27/13 09:45
580-40538-29	WFE-BS25-092613	Solid	09/26/13 12:30	09/27/13 09:45
580-40538-30	WFE-BS26-092613	Solid	09/26/13 12:40	09/27/13 09:45
580-40538-31	WFE-BS126-092613	Solid	09/26/13 12:40	09/27/13 09:45
580-40538-32	WFE-BS27-092613	Solid	09/26/13 12:50	09/27/13 09:45
580-40538-33	WFE-BS28-092613	Solid	09/26/13 12:55	09/27/13 09:45
580-40538-34	WFE-RB1-092613	Water	09/26/13 12:52	09/27/13 09:45

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 3 day
 2 weeks
 1 week
 2 days
 1 day

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 9/24/13
Carrier: _____
COC No: 1 of 4 COCs

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOX Metals (As, Pb, Cd, Cr, Ba) (Y/N)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8290)	Sample Specific Notes
DS-SW5-092413	9/24/13	1735	Grab	SS	1							
DS-SW6-092413		1750			1							
DS-SW7-092413		1810			1							
DS-SW106-092413		1750			1							
DS-RB1-092413		1815		W	3							
WFE-SW11-092513	9/25/13	1310	Grab	SS	1							
WFE-SW12-092513		1320			1							
WFE-SW13-092513		1645			1							
WFE-SW14-092513		1715			1							
WFE-SW15-092513		1725			1							
WFE-SW115-092513		1725			1							



Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____

Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Cooler Temp. (°C): Obs'd: _____ Cor'd: _____ Therm ID No.: _____

Relinquished by: *Mike Wilson* Company: Kennedy Tanks Consultants Date/Time: 9/26/13 15:35

Relinquished by: *John A. Sheppard* Company: TestAmerica Date/Time: 9/26/13 15:35

Relinquished by: *John A. Sheppard* Company: TestAmerica Date/Time: 9/27/13 9:45

Relinquished by: _____ Company: _____ Date/Time: _____



Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA OMEGA MTLA

Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below 3 day
 2 weeks 1 week 2 days 1 day

Site Contact: Howard Young
Lab Contact: Kris Allen

COC No.: 2 of 4 COCs
Date: 9/25/13
Carrier:

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Sample Specific Notes:				
						Perform MS / MSD (Y / N)	TCF Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1211/6020) <i>L</i>	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)
WFE - SW16 - 092513	9/25/13	1750	G	SS	1	✓				
WFE - SW17 - 092613	9/26/13	1320				✓				
WFE - SW18 - 092613	9/26/13	1336				✓				
WFE - SW19 - 092613	↓	1340				✓				
WFE - SM19 - 092613	↓	1340				✓				
WFE - BS15 - 092513	9/25/13	1445				✓				
WFE - BS16 - 092513	↓	1450				✓				
WFE - BS17 - 092513	↓	1455				✓				
WFE - BS18 - 092513	↓	1540				✓				
WFE - BS19 - 092513	↓	1600				✓				
WFE - BS20 - 092513	↓	1630				✓				

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for 1 Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seal No.: _____
Cooler Temp. (°C): Obs'd: _____
Therm ID No.: _____

Relinquished by: *[Signature]* Company: Kennedy Jenk Consultants Date/Time: 9/26/13-1530
Received by: *[Signature]* Company: TestAmerica Date/Time: 9-26-13 15:35

Relinquished by: *[Signature]* Company: _____ Date/Time: _____
Received by: *[Signature]* Company: H.A. Sullivan Date/Time: 9/27/13 9:45

Relinquished by: _____ Company: _____ Date/Time: _____
Received in Laboratory by: _____ Company: _____ Date/Time: _____



Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629/253-952-3435

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below _____ 3 day
 2 weeks
 1 week
 2 days
 1 day

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 9/25/13
Carrier:

COC No.: 3 of 4 COCs

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOTM (As Pb, Cd, Cr, Hg, Se, Ag) (411/6020) (Y/N)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Other (8290)	Sample Specific Notes:
WFE-BS21-092513	9/25/13	1740	G	SS	1	✓	✓	✓					
WFE-BS21-092513		1740	↓	↓	1	✓	✓	✓					
WFE-RB1-092513		1758		W	3	✓	✓	✓					
WFE-BS22-092613	9/26/13	1200	G	SS	1	✓	✓	✓					
WFE-BS23-092613		1210	↓	↓	1	✓	✓	✓					
WFE-BS24-092613		1220	↓	↓	1	✓	✓	✓					
WFE-BS25-092613		1230	↓	↓	1	✓	✓	✓					
WFE-BS26-092613		1240	↓	↓	1	✓	✓	✓					
WFE-BS26-092613		1240	↓	↓	1	✓	✓	✓					
WFE-BS27-092613		1250	↓	↓	1	✓	✓	✓					
WFE-BS28-092613		1255	↓	↓	1	✓	✓	✓					

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seal No.: _____
Cooler Temp. (°C): Obs'd: _____ Cor'd: _____
Therm ID No.: _____

Relinquished by: *Michelle Johnson*
Relinquished by: *Kenny Jank Lovatlands*
Relinquished by: *John C. Wood*

Received by: *Kris Allen*
Received by: *John C. Wood*
Received in Laboratory by: _____

Company: *Kenny Jank Lovatlands*
Company: *TestAmerica*
Company: *PA SA*

Date/Time: 9/26/13 1530
Date/Time: 9/26/13 16:35
Date/Time: 9/27/13 9:45

Relinquished by: _____
Relinquished by: _____
Relinquished by: _____

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40538-1

Login Number: 40538

List Source: TestAmerica Seattle

List Number: 1

Creator: McDaniel, Ronald T

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.	N/A	
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?	N/A	Refer to Job Narrative for details.
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40619-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young



Authorized for release by:
10/3/2013 12:28:05 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Job ID: 580-40619-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/2/2013 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

- 1
- 2
- 3
- 4
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- 6
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- 9
- 10
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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-SW8-100113

Lab Sample ID: 580-40619-1

Date Collected: 10/01/13 09:30

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 88.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.48		mg/Kg	☼	10/02/13 15:22	10/03/13 00:25	10
Barium	140		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:25	10
Cadmium	14		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:25	10
Chromium	11		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:25	10
Lead	180		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:25	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/02/13 18:48	1
Percent Moisture	11		0.10		%			10/02/13 18:48	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-SW9-100113

Lab Sample ID: 580-40619-2

Date Collected: 10/01/13 09:50

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 77.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.63		mg/Kg	☼	10/02/13 15:22	10/03/13 00:33	10
Barium	350		0.25		mg/Kg	☼	10/02/13 15:22	10/03/13 00:33	10
Cadmium	0.65		0.25		mg/Kg	☼	10/02/13 15:22	10/03/13 00:33	10
Chromium	29		0.25		mg/Kg	☼	10/02/13 15:22	10/03/13 00:33	10
Lead	78		0.25		mg/Kg	☼	10/02/13 15:22	10/03/13 00:33	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77		0.10		%			10/02/13 18:48	1
Percent Moisture	23		0.10		%			10/02/13 18:48	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-SW109-100113

Lab Sample ID: 580-40619-3

Date Collected: 10/01/13 09:50

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 77.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.2		0.59		mg/Kg	✱	10/02/13 15:22	10/03/13 00:42	10
Barium	300		0.23		mg/Kg	✱	10/02/13 15:22	10/03/13 00:42	10
Cadmium	ND		0.23		mg/Kg	✱	10/02/13 15:22	10/03/13 00:42	10
Chromium	18		0.23		mg/Kg	✱	10/02/13 15:22	10/03/13 00:42	10
Lead	22		0.23		mg/Kg	✱	10/02/13 15:22	10/03/13 00:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78		0.10		%			10/02/13 18:48	1
Percent Moisture	22		0.10		%			10/02/13 18:48	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-SW10-100113

Lab Sample ID: 580-40619-4

Date Collected: 10/01/13 10:05

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 82.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		0.47		mg/Kg	☼	10/02/13 15:22	10/03/13 00:17	10
Barium	260		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:17	10
Cadmium	0.75		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:17	10
Chromium	16		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:17	10
Lead	460		0.19		mg/Kg	☼	10/02/13 15:22	10/03/13 00:17	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10		%			10/02/13 18:48	1
Percent Moisture	17		0.10		%			10/02/13 18:48	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-SW11-100113

Lab Sample ID: 580-40619-5

Date Collected: 10/01/13 10:15

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 91.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.39		mg/Kg	☼	10/02/13 15:22	10/03/13 00:50	10
Barium	140		0.16		mg/Kg	☼	10/02/13 15:22	10/03/13 00:50	10
Cadmium	ND		0.16		mg/Kg	☼	10/02/13 15:22	10/03/13 00:50	10
Chromium	17		0.16		mg/Kg	☼	10/02/13 15:22	10/03/13 00:50	10
Lead	14		0.16		mg/Kg	☼	10/02/13 15:22	10/03/13 00:50	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/02/13 18:48	1
Percent Moisture	8.9		0.10		%			10/02/13 18:48	1



Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-RB1-100113

Lab Sample ID: 580-40619-6

Date Collected: 10/01/13 09:55

Matrix: Water

Date Received: 10/02/13 10:00

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/02/13 11:59	10/02/13 22:44	5
Barium	ND		0.0060		mg/L		10/02/13 11:59	10/02/13 22:44	5
Cadmium	ND		0.0020		mg/L		10/02/13 11:59	10/02/13 22:44	5
Chromium	ND		0.0020		mg/L		10/02/13 11:59	10/02/13 22:44	5
Lead	ND		0.0020		mg/L		10/02/13 11:59	10/02/13 22:44	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-146404/15-A
Matrix: Solid
Analysis Batch: 146469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146404

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/02/13 15:22	10/02/13 18:07	10
Barium	ND		0.20		mg/Kg		10/02/13 15:22	10/02/13 18:07	10
Cadmium	ND		0.20		mg/Kg		10/02/13 15:22	10/02/13 18:07	10
Chromium	ND		0.20		mg/Kg		10/02/13 15:22	10/02/13 18:07	10
Lead	ND		0.20		mg/Kg		10/02/13 15:22	10/02/13 18:07	10

Lab Sample ID: LCS 580-146404/16-A
Matrix: Solid
Analysis Batch: 146469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146404

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	207		mg/Kg		103	80 - 120
Barium	200	197		mg/Kg		98	80 - 120
Cadmium	5.00	4.63		mg/Kg		93	80 - 120
Chromium	20.0	21.0		mg/Kg		105	80 - 120
Lead	50.0	51.4		mg/Kg		103	80 - 120

Lab Sample ID: LCSD 580-146404/17-A
Matrix: Solid
Analysis Batch: 146469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146404

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	205		mg/Kg		103	80 - 120	1	20
Barium	200	198		mg/Kg		99	80 - 120	1	20
Cadmium	5.00	4.60		mg/Kg		92	80 - 120	1	20
Chromium	20.0	20.5		mg/Kg		103	80 - 120	2	20
Lead	50.0	50.8		mg/Kg		102	80 - 120	1	20

Lab Sample ID: LCSSRM 580-146404/18-A
Matrix: Solid
Analysis Batch: 146469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146404

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	237	265		mg/Kg		111.7	71.3 - 129.1
Barium	252	267		mg/Kg		106.1	73.8 - 126.2
Cadmium	191	200		mg/Kg		105.0	73.3 - 126.7
Chromium	128	138		mg/Kg		108.2	65.5 - 129.7
Lead	103	111		mg/Kg		107.4	70.9 - 128.2

Lab Sample ID: MB 580-146376/18-A
Matrix: Water
Analysis Batch: 146469

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 146376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/02/13 11:38	10/02/13 17:38	5

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-146376/18-A

Matrix: Water

Analysis Batch: 146469

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 146376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0060		mg/L		10/02/13 11:38	10/02/13 17:38	5
Cadmium	ND		0.0020		mg/L		10/02/13 11:38	10/02/13 17:38	5
Chromium	ND		0.0020		mg/L		10/02/13 11:38	10/02/13 17:38	5
Lead	ND		0.0020		mg/L		10/02/13 11:38	10/02/13 17:38	5

Lab Sample ID: LCS 580-146376/19-A

Matrix: Water

Analysis Batch: 146469

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 146376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.15		mg/L		104	80 - 120
Barium	4.00	3.90		mg/L		98	80 - 120
Cadmium	0.100	0.0948		mg/L		95	80 - 120
Chromium	0.400	0.415		mg/L		104	80 - 120
Lead	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: LCSD 580-146376/20-A

Matrix: Water

Analysis Batch: 146469

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 146376

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.13		mg/L		103	80 - 120	1	20
Barium	4.00	3.93		mg/L		98	80 - 120	1	20
Cadmium	0.100	0.0944		mg/L		94	80 - 120	0	20
Chromium	0.400	0.421		mg/L		105	80 - 120	1	20
Lead	1.00	1.04		mg/L		104	80 - 120	0	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40619-1 DU

Matrix: Solid

Analysis Batch: 146417

Client Sample ID: DS-SW8-100113

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		88		%		1	20
Percent Moisture	11		12		%		8	20

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-SW8-100113

Lab Sample ID: 580-40619-1

Date Collected: 10/01/13 09:30

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146404	10/02/13 15:22	PAB	TAL SEA
Total/NA	Analysis	6020		10	146469	10/03/13 00:25	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146417	10/02/13 18:48	PAB	TAL SEA

Client Sample ID: DS-SW9-100113

Lab Sample ID: 580-40619-2

Date Collected: 10/01/13 09:50

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 77.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146404	10/02/13 15:22	PAB	TAL SEA
Total/NA	Analysis	6020		10	146469	10/03/13 00:33	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146417	10/02/13 18:48	PAB	TAL SEA

Client Sample ID: DS-SW109-100113

Lab Sample ID: 580-40619-3

Date Collected: 10/01/13 09:50

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 77.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146404	10/02/13 15:22	PAB	TAL SEA
Total/NA	Analysis	6020		10	146469	10/03/13 00:42	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146417	10/02/13 18:48	PAB	TAL SEA

Client Sample ID: DS-SW10-100113

Lab Sample ID: 580-40619-4

Date Collected: 10/01/13 10:05

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146404	10/02/13 15:22	PAB	TAL SEA
Total/NA	Analysis	6020		10	146469	10/03/13 00:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146417	10/02/13 18:48	PAB	TAL SEA

Client Sample ID: DS-SW11-100113

Lab Sample ID: 580-40619-5

Date Collected: 10/01/13 10:15

Matrix: Solid

Date Received: 10/02/13 10:00

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			146404	10/02/13 15:22	PAB	TAL SEA
Total/NA	Analysis	6020		10	146469	10/03/13 00:50	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146417	10/02/13 18:48	PAB	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Client Sample ID: DS-RB1-100113

Lab Sample ID: 580-40619-6

Date Collected: 10/01/13 09:55

Matrix: Water

Date Received: 10/02/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			146376	10/02/13 11:59	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	146469	10/02/13 22:44	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40619-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40619-1	DS-SW8-100113	Solid	10/01/13 09:30	10/02/13 10:00
580-40619-2	DS-SW9-100113	Solid	10/01/13 09:50	10/02/13 10:00
580-40619-3	DS-SW109-100113	Solid	10/01/13 09:50	10/02/13 10:00
580-40619-4	DS-SW10-100113	Solid	10/01/13 10:05	10/02/13 10:00
580-40619-5	DS-SW11-100113	Solid	10/01/13 10:15	10/02/13 10:00
580-40619-6	DS-RB1-100113	Water	10/01/13 09:55	10/02/13 10:00



Regulatory Program: DW MPDES RCRA MPCA ATCA

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Project Manager: Howard Young
Tel/Fax: 206-419-8629 / 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Carrier: 10/11/13
Date: 10/11/13
COC No: 40619

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below 3 day

Sample Date: 2 weeks 1 week 2 days 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
DS-SW8-100113	10/11/13	0950	G	SS	1
DS-SW9-100113	10/11/13	0950	G	SS	1
DS-SW109-100113	10/11/13	0950	G	SS	1
DS-SW10-100113	10/11/13	1005	G	SS	1
DS-SW11-100113	10/11/13	1015	G	SS	1
DS-RB1-100113	10/11/13	0955	--	W	1

Sample Specific Notes:
Cooler/TB DigIR cor 3.4 unc 3.5
Cooler Dsc Lg Blw/wki @ Lab
Wet(Packs) Packing Bubbb
Fed PO w/cs

Barcode: 580-40619 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Cooler Temp. (°C): Obs'd: 4.4°C Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>Mike Madson</i>	Keweenaw Labs	10/11/13 - 1310	<i>Tom Blunf</i>	TA Spoke	10-1-13 13:10
<i>Tom Blunf</i>	TestAmerica	10-13-13 15:30	<i>Tom Blunf</i>	TA Spoke	10/2/13 1000
<i>Tom Blunf</i>	TestAmerica				

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40619-1

Login Number: 40619

List Number: 1

Creator: Blankinship, Tom X

List Source: TestAmerica Seattle

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?	False	no
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Yardley Office

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40745-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/23/2013 12:25:57 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Job ID: 580-40745-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/8/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

GC Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			10/08/13 16:51	1
Percent Moisture	15		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			10/08/13 16:51	1
Percent Moisture	14		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/08/13 16:51	1
Percent Moisture	11		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/08/13 16:51	1
Percent Moisture	9.4		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10		%			10/08/13 16:51	1
Percent Moisture	2.4		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/08/13 16:51	1
Percent Moisture	11		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			10/08/13 16:51	1
Percent Moisture	6.0		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/08/13 16:51	1
Percent Moisture	11		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/08/13 16:51	1
Percent Moisture	10		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			10/08/13 16:51	1
Percent Moisture	6.8		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			10/08/13 16:51	1
Percent Moisture	5.9		0.10		%			10/08/13 16:51	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-RB1-100713

Lab Sample ID: 580-40745-12

Date Collected: 10/07/13 15:15

Matrix: Water

Date Received: 10/07/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/10/13 13:21	10/10/13 19:04	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/10/13 13:21	10/10/13 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	79		50 - 150				10/10/13 13:21	10/10/13 19:04	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:13	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:13	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:13	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:13	5



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW1-100713

Lab Sample ID: 580-40745-13

Date Collected: 10/07/13 10:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.8		0.42		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10
Barium	95		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10
Cadmium	ND		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10
Chromium	6.6		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 15:40	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/09/13 12:17	1
Percent Moisture	11		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW2-100713

Lab Sample ID: 580-40745-14

Date Collected: 10/07/13 11:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9		0.46		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10
Barium	76		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10
Cadmium	0.22		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10
Chromium	4.7		0.19		mg/Kg	☆	10/21/13 10:36	10/21/13 17:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/09/13 12:17	1
Percent Moisture	9.2		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW3-100713

Lab Sample ID: 580-40745-15

Date Collected: 10/07/13 12:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.41		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10
Barium	95		0.16		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10
Cadmium	0.36		0.16		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10
Chromium	6.5		0.16		mg/Kg	☆	10/21/13 10:36	10/21/13 18:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/09/13 12:17	1
Percent Moisture	8.2		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW4-100713

Lab Sample ID: 580-40745-16

Date Collected: 10/07/13 13:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 79.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.54		mg/Kg	☼	10/21/13 10:36	10/21/13 18:10	10
Barium	390		0.21		mg/Kg	☼	10/21/13 10:36	10/21/13 18:10	10
Cadmium	0.38		0.21		mg/Kg	☼	10/21/13 10:36	10/21/13 18:10	10
Chromium	16		0.21		mg/Kg	☼	10/21/13 10:36	10/21/13 18:10	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			10/09/13 12:17	1
Percent Moisture	20		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS1-100713

Lab Sample ID: 580-40745-17

Date Collected: 10/07/13 10:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.0		0.57		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10
Barium	170		0.23		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10
Cadmium	ND		0.23		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10
Chromium	14		0.23		mg/Kg	✱	10/21/13 10:36	10/21/13 17:10	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			10/09/13 12:17	1
Percent Moisture	15		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS2-100713

Lab Sample ID: 580-40745-18

Date Collected: 10/07/13 12:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.9		0.46		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10
Barium	84		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10
Cadmium	0.21		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10
Chromium	16		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:18	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/09/13 12:17	1
Percent Moisture	8.3		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS3-100713

Lab Sample ID: 580-40745-19

Date Collected: 10/07/13 13:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.8		0.45		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10
Barium	100		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10
Cadmium	0.29		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10
Chromium	18		0.18		mg/Kg	☆	10/21/13 10:36	10/21/13 17:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/09/13 12:17	1
Percent Moisture	12		0.10		%			10/09/13 12:17	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS4-100713

Lab Sample ID: 580-40745-20

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		0.48		mg/Kg	☼	10/21/13 10:36	10/21/13 17:52	10
Barium	110		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 17:52	10
Cadmium	0.29		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 17:52	10
Chromium	17		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 17:52	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/09/13 12:17	1
Percent Moisture	11		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS104-100713

Lab Sample ID: 580-40745-21

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.51		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10
Barium	93		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10
Cadmium	0.23		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10
Chromium	15		0.21		mg/Kg	☆	10/21/13 10:36	10/21/13 17:27	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/09/13 12:17	1
Percent Moisture	12		0.10		%			10/09/13 12:17	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-RB1-100713

Lab Sample ID: 580-40745-22

Date Collected: 10/07/13 13:30

Matrix: Water

Date Received: 10/07/13 16:15

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:18	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:18	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:18	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:18	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146989/1-B

Matrix: Water

Analysis Batch: 146943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146989

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/10/13 13:21	10/10/13 17:35	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/10/13 13:21	10/10/13 17:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150	10/10/13 13:21	10/10/13 17:35	1

Lab Sample ID: LCS 580-146989/2-B

Matrix: Water

Analysis Batch: 146943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.46		mg/L		87	70 - 130
Motor Oil (>C24-C36)	4.00	4.10		mg/L		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	84		50 - 150

Lab Sample ID: LCSD 580-146989/3-B

Matrix: Water

Analysis Batch: 146943

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 146989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.39		mg/L		85	70 - 130	2	30
Motor Oil (>C24-C36)	4.00	4.07		mg/L		102	70 - 130	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	78		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147654/23-A

Matrix: Solid

Analysis Batch: 147707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147654

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Barium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Cadmium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Chromium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10

Lab Sample ID: LCS 580-147654/24-A

Matrix: Solid

Analysis Batch: 147707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	197		mg/Kg		98	80 - 120
Barium	200	192		mg/Kg		96	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-147654/24-A
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.00	4.83		mg/Kg		97	80 - 120
Chromium	20.0	19.2		mg/Kg		96	80 - 120

Lab Sample ID: LCSD 580-147654/25-A
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	197		mg/Kg		99	80 - 120	0	20
Barium	200	193		mg/Kg		96	80 - 120	0	20
Cadmium	5.00	4.73		mg/Kg		95	80 - 120	2	20
Chromium	20.0	19.5		mg/Kg		98	80 - 120	2	20

Lab Sample ID: 580-40745-13 MS
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: YO-SW1-100713
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.8		176	185		mg/Kg	☼	103	80 - 120
Barium	95		176	263		mg/Kg	☼	96	80 - 120
Cadmium	ND		4.40	4.57		mg/Kg	☼	101	80 - 120
Chromium	6.6		17.6	23.7		mg/Kg	☼	97	80 - 120

Lab Sample ID: 580-40745-13 MSD
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: YO-SW1-100713
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	3.8		174	184		mg/Kg	☼	104	80 - 120	0	20
Barium	95		174	283		mg/Kg	☼	109	80 - 120	7	20
Cadmium	ND		4.34	4.46		mg/Kg	☼	99	80 - 120	3	20
Chromium	6.6		17.4	24.5		mg/Kg	☼	103	80 - 120	3	20

Lab Sample ID: 580-40745-13 DU
Matrix: Solid
Analysis Batch: 147707

Client Sample ID: YO-SW1-100713
Prep Type: Total/NA
Prep Batch: 147654

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	3.8		3.54		mg/Kg	☼	6	20
Barium	95		88.8		mg/Kg	☼	6	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	6.6		6.20		mg/Kg	☼	7	20

Lab Sample ID: MB 580-147239/19-A
Matrix: Water
Analysis Batch: 147327

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 147239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 18:17	5

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-147239/19-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 18:17	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5

Lab Sample ID: LCS 580-147239/20-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.04		mg/L		101	80 - 120
Barium	4.00	3.96		mg/L		99	80 - 120
Cadmium	0.100	0.0951		mg/L		95	80 - 120
Chromium	0.400	0.389		mg/L		97	80 - 120

Lab Sample ID: LCSD 580-147239/21-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.08		mg/L		102	80 - 120	1	20
Barium	4.00	3.99		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.0952		mg/L		95	80 - 120	0	20
Chromium	0.400	0.389		mg/L		97	80 - 120	0	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40745-13 DU

Matrix: Solid

Analysis Batch: 146878

Client Sample ID: YO-SW1-100713

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.3	20
Percent Moisture	11		11		%		3	20

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW1-100713

Lab Sample ID: 580-40745-1

Date Collected: 10/07/13 09:45

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW2-100713

Lab Sample ID: 580-40745-2

Date Collected: 10/07/13 09:50

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW3-100713

Lab Sample ID: 580-40745-3

Date Collected: 10/07/13 09:55

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW4-100713

Lab Sample ID: 580-40745-4

Date Collected: 10/07/13 11:05

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW5-100713

Lab Sample ID: 580-40745-5

Date Collected: 10/07/13 11:10

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-SW6-100713

Lab Sample ID: 580-40745-6

Date Collected: 10/07/13 13:30

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: MSB-SW7-100713

Lab Sample ID: 580-40745-7

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS1-100713

Lab Sample ID: 580-40745-8

Date Collected: 10/07/13 10:05

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS2-100713

Lab Sample ID: 580-40745-9

Date Collected: 10/07/13 10:15

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS3-100713

Lab Sample ID: 580-40745-10

Date Collected: 10/07/13 11:00

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-BS4-100713

Lab Sample ID: 580-40745-11

Date Collected: 10/07/13 13:35

Matrix: Solid

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	146826	10/08/13 16:51	PAB	TAL SEA

Client Sample ID: MSB-RB1-100713

Lab Sample ID: 580-40745-12

Date Collected: 10/07/13 15:15

Matrix: Water

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146989	10/10/13 13:21	RBL	TAL SEA
Total/NA	Cleanup	3630C			147004	10/10/13 16:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146943	10/10/13 19:04	JL1	TAL SEA
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:13	FCW	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-SW1-100713

Lab Sample ID: 580-40745-13

Date Collected: 10/07/13 10:45

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 15:40	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-SW2-100713

Lab Sample ID: 580-40745-14

Date Collected: 10/07/13 11:55

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:01	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-SW3-100713

Lab Sample ID: 580-40745-15

Date Collected: 10/07/13 12:05

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 18:01	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-SW4-100713

Lab Sample ID: 580-40745-16

Date Collected: 10/07/13 13:15

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 18:10	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS1-100713

Lab Sample ID: 580-40745-17

Date Collected: 10/07/13 10:50

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:10	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Client Sample ID: YO-BS2-100713

Lab Sample ID: 580-40745-18

Date Collected: 10/07/13 12:00

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:18	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS3-100713

Lab Sample ID: 580-40745-19

Date Collected: 10/07/13 13:10

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS4-100713

Lab Sample ID: 580-40745-20

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:52	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-BS104-100713

Lab Sample ID: 580-40745-21

Date Collected: 10/07/13 13:25

Matrix: Solid

Date Received: 10/07/13 16:15

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 17:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	146878	10/09/13 12:17	JL1	TAL SEA

Client Sample ID: YO-RB1-100713

Lab Sample ID: 580-40745-22

Date Collected: 10/07/13 13:30

Matrix: Water

Date Received: 10/07/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:18	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40745-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40745-1	MSB-SW1-100713	Solid	10/07/13 09:45	10/07/13 16:15
580-40745-2	MSB-SW2-100713	Solid	10/07/13 09:50	10/07/13 16:15
580-40745-3	MSB-SW3-100713	Solid	10/07/13 09:55	10/07/13 16:15
580-40745-4	MSB-SW4-100713	Solid	10/07/13 11:05	10/07/13 16:15
580-40745-5	MSB-SW5-100713	Solid	10/07/13 11:10	10/07/13 16:15
580-40745-6	MSB-SW6-100713	Solid	10/07/13 13:30	10/07/13 16:15
580-40745-7	MSB-SW7-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-8	MSB-BS1-100713	Solid	10/07/13 10:05	10/07/13 16:15
580-40745-9	MSB-BS2-100713	Solid	10/07/13 10:15	10/07/13 16:15
580-40745-10	MSB-BS3-100713	Solid	10/07/13 11:00	10/07/13 16:15
580-40745-11	MSB-BS4-100713	Solid	10/07/13 13:35	10/07/13 16:15
580-40745-12	MSB-RB1-100713	Water	10/07/13 15:15	10/07/13 16:15
580-40745-13	YO-SW1-100713	Solid	10/07/13 10:45	10/07/13 16:15
580-40745-14	YO-SW2-100713	Solid	10/07/13 11:55	10/07/13 16:15
580-40745-15	YO-SW3-100713	Solid	10/07/13 12:05	10/07/13 16:15
580-40745-16	YO-SW4-100713	Solid	10/07/13 13:15	10/07/13 16:15
580-40745-17	YO-BS1-100713	Solid	10/07/13 10:50	10/07/13 16:15
580-40745-18	YO-BS2-100713	Solid	10/07/13 12:00	10/07/13 16:15
580-40745-19	YO-BS3-100713	Solid	10/07/13 13:10	10/07/13 16:15
580-40745-20	YO-BS4-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-21	YO-BS104-100713	Solid	10/07/13 13:25	10/07/13 16:15
580-40745-22	YO-RB1-100713	Water	10/07/13 13:30	10/07/13 16:15

TestAmerica Seattle
5755 8th Street East

Chain of Custody Record



Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW WPPES RCRA OMSCA APCA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact: **Bruce Sheppard**
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Manager: **Howard Young**
Tel/Fax: 206-419-8629/ 253-952-3435
Site Contact: **Howard Young**
Lab Contact: **Kris Allen**

Carrier: **1017-113**
Date: **10/7/13**
GOC No.: **1** of **2** CDCs

Project Name: **Parkwater RA**
Site: **Parkwater, Spokane, WA**
P O # **BNSF Direct Bill Work Order No. TT0101-N10**

Analysis Turnaround Time
 CALENDAR DAYS
 WORKING DAYS
TAT if different from Below: 3 day
 2 weeks
 1 week
 2 days
 1 day

Sampler: **1**
For Lab Use Only:
Walk-in Client: **1**
Lab Sampling: **1**
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOT Metals (As, Pb, Cd, Cr, Ba, Hg, So, Ag) (424W6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	UNITH-DX W/SILICA CEL CLEAN UP DIESEL OIL TANK	Sample Specific Notes
MSB-SW1-100713	10/7/13	0945	G	S	1		X						1 day TAT
MSB-SW2-100713		0950	G	S	1		X						
MSB-SW3-100713		0955	G	S	1		X						
MSB-SW4-100713		1005	G	S	1		X						
MSB-SW5-100713		1110	G	S	1		X						
MSB-SW6-100713		1330	G	S	1		X						
MSB-SW7-100713		1325	G	S	1		X						
MSB-B51-100713		1005	G	S	1		X						
MSB-B52-100713		1015	G	S	1		X						
MSB-B53-100713		1100	G	S	1		X						
MSB-B54-100713		1335	G	S	1		X						

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other
Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client
 Disposal by Lab
 Archive for _____ Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seals Intact: Yes No

Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]* Received by: *[Signature]* Date/Time: *[Date/Time]*

Relinquished by: *[Signature]* Company: *[Company Name]* Date/Time: *[Date/Time]* Received in Laboratory by: *[Signature]* Date/Time: *[Date/Time]*

Form No. CA-C-W-002, Rev. 4.2, dated 04/02/2013



TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

40745



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA OMSCA MTLA

Project Manager: Howard Young
Tel/Fax: 206-419-8629 / 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 10/11/13
Carrier: 10/11/13

COC No: 2 of 2 COCs

Client Contact: Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 5-8 STD TAT
 2 weeks
 1 week
 2 days
 1 day

Filtered Sample (Y / N)
Perform MS / MSD (Y / N)
TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)
Semivolatile Organics (8270)
PCBs (8082)
Volatile Organic Compounds (8260)

NWTPH-DX W/SILVA
CEL CLEAN UP
DESEL OIL TANK
As, Ba, Cd, & Total Cr (EPA 6020)

Sampler: 1 STD TAT 12
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (c-Comp, g-grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Carrier	Sample Specific Notes:
MSB-DB1-100713	10/10	1515	g	W	3								1 STD TAT 12
Y0-SW1-100713		1045		SS	1								1 STD TAT 12
Y0-SW2-100713		1155											1 STD TAT 12
Y0-SW3-100713		1205											1 STD TAT 12
Y0-SW4-100713		1315											1 STD TAT 12
Y0-B51-100713		1050											1 STD TAT 12
Y0-B52-100713		1200											1 STD TAT 12
Y0-B53-100713		1310											1 STD TAT 12
Y0-B54-100713		1325											1 STD TAT 12
Y0-B5104-100713		1325											1 STD TAT 12
Y0-R01-100713		1330											1 STD TAT 12

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seals Intact: Yes No

Company: TestAmerica
Date/Time: 10/11/13 15:50
Received by: [Signature]
Received in Laboratory by: [Signature]

Company: TestAmerica
Date/Time: 10/11/13 14:55
Received by: [Signature]
Received in Laboratory by: [Signature]

Company: TestAmerica
Date/Time: 10/11/13 14:55
Received by: [Signature]
Received in Laboratory by: [Signature]

Company: TestAmerica
Date/Time: 10/11/13 14:55
Received by: [Signature]
Received in Laboratory by: [Signature]

Cooler/TB Dig/IR cor 5.8 unc 5.3
Cooler Dsc hollow @ Lab
Wet/Packs Packing bubble
w/Co. FedEx P.O.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Temperature readings: 11:50 - 3.5°C, 12:05 - 3.7°C put away @ 12:06 *CL*

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
MSB-RB1-100713	580-40745-A-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-B-12	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100713	580-40745-C-12	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100713	580-40745-A-22	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____

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- 10
- 11



TestAmerica
5755 8th Street East



580-40745 Chain of Custody

Chain of Custody Record

Received by: *[Signature]*
10/23/13

40745

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5144

Project Manager: Howard Young
Tel/Fax: 206-419-8029/253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 10-21-13

COG No. of 2 COGS

TestAmerica
Laboratories, Inc.

Client Contact
Bruce Sheppard
BNSF Railway
2164 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time:
 1-2 weeks
 3-4 weeks
 5-6 weeks
 7-8 weeks
 9-10 weeks
 11-12 weeks
 13-14 weeks
 15-16 weeks
 17-18 weeks
 19-20 weeks
 21-22 weeks
 23-24 weeks
 25-26 weeks
 27-28 weeks
 29-30 weeks
 31-32 weeks
 33-34 weeks
 35-36 weeks
 37-38 weeks
 39-40 weeks
 41-42 weeks
 43-44 weeks
 45-46 weeks
 47-48 weeks
 49-50 weeks
 51-52 weeks

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P.O.#: BNSF Direct Bill Work Order No. FT101014110

Carrier: *[Blank]*

Sampler: *[Blank]*
For Lab Use Only:
Walk-in Client: *[Blank]*
Lab Sampling: *[Blank]*
Job / SDG No.: *[Blank]*

Sample Identification	Sample Date	Sample Time	Sample Type (Genly, Genly)	Matrix	# of Cont.
MSB-SW1-1007113	10/15	0915	L1	S	1
MSB-SW2-1007113	10/15	0950	L1	S	1
MSB-SW3-1007113	10/15	0955	L1	S	1
MSB-SW4-1007113	10/15	1005	L1	S	1
MSB-SW5-1007113	10/15	1110	L1	S	1
MSB-SW6-1007113	10/15	1330	L1	S	1
MSB-SW7-1007113	10/15	1325	L1	S	1
MSB-B51-1007113	10/15	1005	L1	S	1
MSB-B52-1007113	10/15	1015	L1	S	1
MSB-B53-1007113	10/15	1100	L1	S	1
MSB-B54-1007113	10/15	1335	L1	S	1

Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	SWTPH-DX W/SUB	CEL CLEAN UP	DESIG 40L DRAIN
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Non-Hazard Flammable Shift Intact Presorb Unknown Return to Client Disposal by Lab Archive for: Months

Original Seals Intact: Yes No

Relinquished by: *[Signature]* Custody Seal No. *[Blank]* Coder Temp. (C): *[Blank]* Obs'd: *[Blank]* Therm ID No.: *[Blank]*

Relinquished by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]* Receiver by: *[Signature]* Date/Time: *[Blank]*

Relinquished by: *[Signature]* Company: *[Blank]* Date/Time: *[Blank]* Receiver by: *[Signature]* Date/Time: *[Blank]*

Chain of Custody Record

Regulatory Program: DW HOURS JACO METCA ATCA

40713

Client Contact BNSF Railroad 2161 Occidental Avenue South, Suite 1A Seattle, Washington 98134-1451		Project Manager: Howard Young Tel/Fax: 206-419-8639/253-982-3435		Site Contact: Howard Young		Date: 10/13		COC No: 2 of 2 COCs						
Project Name: Parkwater RA Site: Parkwater, Spokane, WA P.O.#: BNSF Direct Bill Work Order No. TT0101-N10		Analysis Turnaround Time <input type="checkbox"/> Calendar Days <input checked="" type="checkbox"/> Working Days TAT in alternate font below <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 5-7 days <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Lab Contact: Kris Allen		Carrier:		Sample: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No:						
Sample Identification		Sample Date	Sample Time	Sample Type (e-Cont, s-Cont)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	As, Pb, Cd, & Total Cr (EPA 8020)	Sample Specific Notes
MSB-2281-100713		10/16	1515	ts	SS	3								10/13 TAT 12
Y0-SW1-100713			1045			1								10/13 TAT 13
Y0-SW2-100713			1155			1								10/13 TAT 14
Y0-SW3-100713			1205			1								10/13 TAT 15
Y0-SW4-100713			1315			1								10/13 TAT 16
Y0-B51-100713			1050			1								10/13 TAT 17
Y0-B52-100713			1200			1								10/13 TAT 18
Y0-B53-100713			1310			1								10/13 TAT 19
Y0-B54-100713			1325			1								10/13 TAT 20
Y0-B5104-100713			1325			1								10/13 TAT 21
Y0-R01-100713			1330			1								10/13 TAT 22

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please list any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-hazard Flammable Skin Irritant Poison II Unknown

Specific analysis lists on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Mediums: Client Dispatch by Lab Method for Months

Custody Seals Intact: Yes No

Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/13/13 15:50*

Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/13/13*

Relinquished by: *[Signature]* Company: *[Signature]* Date/Time: *10/13/13*

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2016



**Presley, Kim**

From: Howard Young [HowardYoung@KennedyJenks.com]
Sent: Tuesday, October 08, 2013 7:52 AM
To: Berry, Vanessa; Presley, Kim
Cc: Allen, Kristine
Subject: FW: BNSF Parkwater revised COC for samples collected on 10/7/2013
Attachments: COC_100813.PDF

Good Morning,
Kris is out today so can one of you address my email below and let me know it has been done.

Thank you,

Howard S. Young, LG
Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

From: Howard Young
Sent: Tuesday, October 08, 2013 7:44 AM
To: Kristine Allen (Kris.Allen@testamericainc.com)
Cc: Chris LaRose; Matt Wilson
Subject: BNSF Parkwater revised COC for samples collected on 10/7/2013

Kris,
Here is a revised COC for the samples that we collected on 10/7/2013 and you will receive this morning.

- Removed lead from the COC list
- No need to run the NWTPH-dx analysis in Nashville. Just run in Tacoma on 5 day TAT.

Thank you,

Howard S. Young, LG
Kennedy/Jenks Consultants
32001 32nd Ave S. Suite 100 | Federal Way, WA 98001
P: 253.835.6400 | F: 253.952.3435 | Direct: 253.835.6431 | C: 206.419.8629

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40745-1

Login Number: 40745

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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?	False	Not filled on CoC
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40770-1
Client Project/Site: Parkwater RA

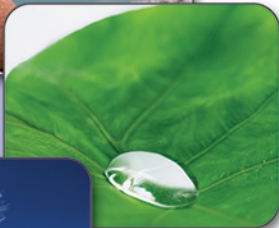
For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/23/2013 5:11:45 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com



LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Job ID: 580-40770-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/9/2013 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 147753 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Qualifiers

Metals

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: MSB-RB1-100813

Lab Sample ID: 580-40770-5

Date Collected: 10/08/13 12:15

Matrix: Water

Date Received: 10/09/13 09:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		10/10/13 13:21	10/10/13 18:46	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		10/10/13 13:21	10/10/13 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	70		50 - 150				10/10/13 13:21	10/10/13 18:46	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 21:43	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 21:43	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 21:43	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 21:43	5



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW5-100813

Lab Sample ID: 580-40770-6

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	31		0.48		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10
Barium	150		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10
Cadmium	0.70		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10
Chromium	23		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 14:26	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/11/13 13:21	1
Percent Moisture	13		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW6-100813

Lab Sample ID: 580-40770-7

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.4		0.43		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10
Barium	84		0.17		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10
Cadmium	ND		0.17		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10
Chromium	6.5		0.17		mg/Kg	✱	10/22/13 11:58	10/22/13 14:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/11/13 13:21	1
Percent Moisture	9.6		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW7-100813

Lab Sample ID: 580-40770-8

Date Collected: 10/08/13 11:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 89.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.50		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10
Barium	100		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10
Cadmium	0.61		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10
Chromium	14		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:00	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/11/13 13:21	1
Percent Moisture	10		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW8-100813

Lab Sample ID: 580-40770-9

Date Collected: 10/08/13 12:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 81.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		0.51		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10
Barium	460		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10
Cadmium	0.53		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10
Chromium	19		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:04	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10		%			10/11/13 13:21	1
Percent Moisture	19		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW9-100813

Lab Sample ID: 580-40770-10

Date Collected: 10/08/13 12:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		0.47		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10
Barium	100		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10
Cadmium	0.59		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10
Chromium	14		0.19		mg/Kg	☆	10/22/13 11:58	10/22/13 15:09	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/11/13 13:21	1
Percent Moisture	11		0.10		%			10/11/13 13:21	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW105-100813

Lab Sample ID: 580-40770-11

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 87.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.51		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10
Barium	230		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10
Cadmium	0.38		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10
Chromium	19		0.20		mg/Kg	☆	10/22/13 11:58	10/22/13 15:13	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/11/13 13:21	1
Percent Moisture	12		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-BS5-100813

Lab Sample ID: 580-40770-12

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		0.37		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10
Barium	120		0.15		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10
Cadmium	ND		0.15		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10
Chromium	22		0.15		mg/Kg	☆	10/22/13 11:58	10/22/13 15:17	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/11/13 13:21	1
Percent Moisture	13		0.10		%			10/11/13 13:21	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-BS6-100813

Lab Sample ID: 580-40770-13

Date Collected: 10/08/13 12:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 84.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.43		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10
Barium	210		0.17		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10
Cadmium	0.19		0.17		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10
Chromium	24		0.17		mg/Kg	☆	10/22/13 11:58	10/22/13 15:21	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			10/11/13 13:21	1
Percent Moisture	16		0.10		%			10/11/13 13:21	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-RB1-100813

Lab Sample ID: 580-40770-14

Date Collected: 10/08/13 10:50

Matrix: Water

Date Received: 10/09/13 09:40

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:31	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:31	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:31	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:31	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-146989/1-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146989

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		10/10/13 13:21	10/10/13 17:35	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		10/10/13 13:21	10/10/13 17:35	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/10/13 13:21	10/10/13 17:35	1

Lab Sample ID: LCS 580-146989/2-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	4.00	3.46		mg/L		87	70 - 130
Motor Oil (>C24-C36)	4.00	4.10		mg/L		103	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	84		50 - 150				

Lab Sample ID: LCSD 580-146989/3-B
Matrix: Water
Analysis Batch: 146943

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.39		mg/L		85	70 - 130	2	30
Motor Oil (>C24-C36)	4.00	4.07		mg/L		102	70 - 130	1	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	78		50 - 150						

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147753/12-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/22/13 11:58	10/22/13 14:09	10
Barium	ND		0.20		mg/Kg		10/22/13 11:58	10/22/13 14:09	10
Cadmium	ND		0.20		mg/Kg		10/22/13 11:58	10/22/13 14:09	10
Chromium	ND		0.20		mg/Kg		10/22/13 11:58	10/22/13 14:09	10

Lab Sample ID: LCS 580-147753/13-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	199		mg/Kg		99	80 - 120
Barium	200	192		mg/Kg		96	80 - 120

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-147753/13-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.00	4.64		mg/Kg		93	80 - 120
Chromium	20.0	19.3		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-147753/14-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	199		mg/Kg		100	80 - 120	0	20
Barium	200	192		mg/Kg		96	80 - 120	0	20
Cadmium	5.00	4.55		mg/Kg		91	80 - 120	2	20
Chromium	20.0	19.1		mg/Kg		96	80 - 120	1	20

Lab Sample ID: 580-40770-6 MS
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	31		211	270		mg/Kg	☼	113	80 - 120
Barium	150		211	425	F	mg/Kg	☼	129	80 - 120
Cadmium	0.70		5.28	5.99		mg/Kg	☼	100	80 - 120
Chromium	23		21.1	49.1	F	mg/Kg	☼	122	80 - 120

Lab Sample ID: 580-40770-6 MSD
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	31		206	253		mg/Kg	☼	108	80 - 120	7	20
Barium	150		206	367		mg/Kg	☼	104	80 - 120	15	20
Cadmium	0.70		5.14	5.72		mg/Kg	☼	98	80 - 120	5	20
Chromium	23		20.6	39.4	F	mg/Kg	☼	77	80 - 120	22	20

Lab Sample ID: 580-40770-6 DU
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA
Prep Batch: 147753

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	31		26.9		mg/Kg	☼	13	20
Barium	150		135		mg/Kg	☼	13	20
Cadmium	0.70		0.621		mg/Kg	☼	12	20
Chromium	23		20.9		mg/Kg	☼	12	20

Lab Sample ID: MB 580-147239/19-A
Matrix: Water
Analysis Batch: 147327

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 147239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 18:17	5

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-147239/19-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 18:17	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5

Lab Sample ID: LCS 580-147239/20-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Arsenic	4.00	4.04		mg/L		101	80 - 120
Barium	4.00	3.96		mg/L		99	80 - 120
Cadmium	0.100	0.0951		mg/L		95	80 - 120
Chromium	0.400	0.389		mg/L		97	80 - 120

Lab Sample ID: LCSD 580-147239/21-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Arsenic	4.00	4.08		mg/L		102	80 - 120	1	20
Barium	4.00	3.99		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.0952		mg/L		95	80 - 120	0	20
Chromium	0.400	0.389		mg/L		97	80 - 120	0	20

Lab Sample ID: 580-40770-5 MS

Matrix: Water

Analysis Batch: 147327

Client Sample ID: MSB-RB1-100813

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Arsenic	ND		4.00	4.03		mg/L		101	80 - 120
Barium	ND		4.00	4.10		mg/L		103	80 - 120
Cadmium	ND		0.100	0.0935		mg/L		94	80 - 120
Chromium	ND		0.400	0.382		mg/L		95	80 - 120

Lab Sample ID: 580-40770-5 MSD

Matrix: Water

Analysis Batch: 147327

Client Sample ID: MSB-RB1-100813

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
Arsenic	ND		4.00	4.13		mg/L		103	80 - 120	2	20
Barium	ND		4.00	4.10		mg/L		102	80 - 120	0	20
Cadmium	ND		0.100	0.0938		mg/L		94	80 - 120	0	20
Chromium	ND		0.400	0.388		mg/L		97	80 - 120	2	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40770-5 DU
Matrix: Water
Analysis Batch: 147327

Client Sample ID: MSB-RB1-100813
Prep Type: Total Recoverable
Prep Batch: 147239

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Arsenic	ND		ND		mg/L		NC	20
Barium	ND		ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40770-6 DU
Matrix: Solid
Analysis Batch: 147074

Client Sample ID: YO-SW5-100813
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Percent Solids	87		88		%		1	20
Percent Moisture	13		12		%		10	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: MSB-RB1-100813

Lab Sample ID: 580-40770-5

Date Collected: 10/08/13 12:15

Matrix: Water

Date Received: 10/09/13 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146989	10/10/13 13:21	RBL	TAL SEA
Total/NA	Cleanup	3630C			147004	10/10/13 16:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146943	10/10/13 18:46	JL1	TAL SEA
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 21:43	FCW	TAL SEA

Client Sample ID: YO-SW5-100813

Lab Sample ID: 580-40770-6

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 14:26	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW6-100813

Lab Sample ID: 580-40770-7

Date Collected: 10/08/13 11:20

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 14:56	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW7-100813

Lab Sample ID: 580-40770-8

Date Collected: 10/08/13 11:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:00	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW8-100813

Lab Sample ID: 580-40770-9

Date Collected: 10/08/13 12:25

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Client Sample ID: YO-SW9-100813

Lab Sample ID: 580-40770-10

Date Collected: 10/08/13 12:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:09	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-SW105-100813

Lab Sample ID: 580-40770-11

Date Collected: 10/08/13 10:45

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:13	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-BS5-100813

Lab Sample ID: 580-40770-12

Date Collected: 10/08/13 11:35

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-BS6-100813

Lab Sample ID: 580-40770-13

Date Collected: 10/08/13 12:30

Matrix: Solid

Date Received: 10/09/13 09:40

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147753	10/22/13 11:58	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:21	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147074	10/11/13 13:21	JL1	TAL SEA

Client Sample ID: YO-RB1-100813

Lab Sample ID: 580-40770-14

Date Collected: 10/08/13 10:50

Matrix: Water

Date Received: 10/09/13 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:31	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40770-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40770-5	MSB-RB1-100813	Water	10/08/13 12:15	10/09/13 09:40
580-40770-6	YO-SW5-100813	Solid	10/08/13 10:45	10/09/13 09:40
580-40770-7	YO-SW6-100813	Solid	10/08/13 11:20	10/09/13 09:40
580-40770-8	YO-SW7-100813	Solid	10/08/13 11:45	10/09/13 09:40
580-40770-9	YO-SW8-100813	Solid	10/08/13 12:25	10/09/13 09:40
580-40770-10	YO-SW9-100813	Solid	10/08/13 12:35	10/09/13 09:40
580-40770-11	YO-SW105-100813	Solid	10/08/13 10:45	10/09/13 09:40
580-40770-12	YO-BS5-100813	Solid	10/08/13 11:35	10/09/13 09:40
580-40770-13	YO-BS6-100813	Solid	10/08/13 12:30	10/09/13 09:40
580-40770-14	YO-RB1-100813	Water	10/08/13 10:50	10/09/13 09:40



TestAmerica Seattle
5755 8th Street East

580-40770 Chain of Custody



Chain of Custody Record

40 770

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA

OMTCA MTLA

TestAmerica Laboratories, Inc.

Client Contact

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Site Contact: Howard Young

Date: 10/8/13

COC No: 1 of 2 COCs

Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS

Lab Contact: Kris Allen

Carrier:

Sampler: 1

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-4N10

TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

For Lab Use Only:
Walk-in Client
Lab Sampling:

Job / SDG No.:

Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TCL Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (14944/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	NWTPH-DX W/SALKA	LEEL CLEAN UP	DIESEL & OIL TANKS
MSB-5W8-100813	10/8/13	1120	L	S	1	X	X					X		
MSB-5W9-100813		1125		S	1	X	X					X		
MSB-5W10-100813		1130		S	1	X	X					X		
MSB-B55-100813		1135		S	1	X	X					X		
MSB-B31-100813		1215		S	3	X	X					X		
Y0-5W5-100813		1045		S	1	X	X							
Y0-5W6-100813		1120		S	1	X	X							
Y0-5W7-100813		1145		S	1	X	X							
Y0-5W8-100813		1225		S	1	X	X							
Y0-5W9-100813		1235		S	1	X	X							
Y0-5W105-100813		1045		S	1	X	X							

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposed by Lab Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seals Intact: Yes No

Cooler Temp. (°C): Obs'd: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: <i>[Signature]</i>	Company: Kennedy Tank Containers	Date/Time: 10/8/13 15:30	Received by: <i>[Signature]</i>	Company: TestAmerica	Date/Time: 10/8/13 14:00
Relinquished by: <i>[Signature]</i>	Company: TestAmerica	Date/Time: 10/9/13 9:40	Received by: <i>[Signature]</i>	Company: TestAmerica	Date/Time: 10/9/13 9:40

TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

40710

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA OMEGA MTCA

TestAmerica Laboratories, Inc

Client Contact: Bruce Sheppard
Project Manager: Howard Young
Site Contact: Howard Young
Date: 10/8/13

BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451
Tel/Fax: 206-419-8629/ 253-952-3435
Lab Contact: Kris Allen
Carrier:
COC No:
of COCs

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: 570 TAT
2 weeks
1 week
2 days
1 day

Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT10101-N10

Sample Identification	Sample Date	Sample Time	Sample Type (G-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag, Ni, P, H/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Carrier	Sampler:	For Lab Use Only:	Lab Sampling:	Job / SDG No.:	
Y0-B55-100813	10/8/13	1135	G	S	1		X										
Y0-B56-100813	10/8/13	1230	G	↓	1		X										
Y0-RB1-100813	10/8/13	1050	G	↓	1		X										

Sample Specific Notes:
R STD TAT
B
H
↓

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for 1 Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Cooler/TB DigIR cor 5.1 unc 4.9
Cooler Dsc publwh @ Lab
WED Packs Packing bubble
w/co Fisher PC

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.
Custody Seals Intact: Yes No
Custody Seal No.:
Custody Temp. (C): Obs'd:
Therm ID No.: 5.90C

Relinquished by: [Signature]
Company: TestAmerica
Date/Time: 10/8/13 1405

Relinquished by: [Signature]
Company: TestAmerica
Date/Time: 10/9/13 9:40

Relinquished by: [Signature]
Company: TestAmerica
Date/Time: 10/8/13 1405

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Temperature readings: 3.6 °C - 13:55, put away @ 14:05.

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> pH	<u>Preservative</u> Added (mls)	<u>Lot #</u>
MSB-RB1-100813	580-40770-A-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-B-5	Amber Glass 125mL - hydrochloric	<u>1.5</u>	_____	_____
MSB-RB1-100813	580-40770-C-5	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____
YO-RB1-100813	580-40770-A-14	Plastic 250ml - with Nitric Acid	<u>1.0</u>	_____	_____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40770-1

Login Number: 40770

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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.	N/A	not present
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?	False	Not filled in on CoC
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40825-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young

Kristine D. Allen

Authorized for release by:
10/24/2013 4:17:17 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Job ID: 580-40825-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/10/2013 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) precision for prep batch 147762 was outside control limits for Cadmium. Non-homogeneity of the sample matrix is suspected. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.



Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Qualifiers

Metals

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS7-100913

Lab Sample ID: 580-40825-1

Date Collected: 10/09/13 10:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 87.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.0		0.52		mg/Kg	☆	10/22/13 12:29	10/22/13 15:56	10
Barium	120		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 15:56	10
Cadmium	ND		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 15:56	10
Chromium	12		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 15:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/14/13 12:58	1
Percent Moisture	12		0.10		%			10/14/13 12:58	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS8-100913

Lab Sample ID: 580-40825-2

Date Collected: 10/09/13 11:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.48		mg/Kg	☆	10/22/13 12:29	10/22/13 16:26	10
Barium	190		0.19		mg/Kg	☆	10/22/13 12:29	10/22/13 16:26	10
Cadmium	0.20		0.19		mg/Kg	☆	10/22/13 12:29	10/22/13 16:26	10
Chromium	22		0.19		mg/Kg	☆	10/22/13 12:29	10/22/13 16:26	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			10/14/13 12:58	1
Percent Moisture	14		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS108-100913

Lab Sample ID: 580-40825-3

Date Collected: 10/09/13 11:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 84.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.50		mg/Kg	☆	10/22/13 12:29	10/22/13 16:30	10
Barium	170		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 16:30	10
Cadmium	ND		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 16:30	10
Chromium	20		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 16:30	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			10/14/13 12:58	1
Percent Moisture	15		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS9-100913

Lab Sample ID: 580-40825-4

Date Collected: 10/09/13 11:30

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 87.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.5		0.54		mg/Kg	☆	10/22/13 12:29	10/22/13 16:34	10
Barium	180		0.22		mg/Kg	☆	10/22/13 12:29	10/22/13 16:34	10
Cadmium	ND		0.22		mg/Kg	☆	10/22/13 12:29	10/22/13 16:34	10
Chromium	17		0.22		mg/Kg	☆	10/22/13 12:29	10/22/13 16:34	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			10/14/13 12:58	1
Percent Moisture	12		0.10		%			10/14/13 12:58	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS10-100913

Lab Sample ID: 580-40825-5

Date Collected: 10/09/13 11:55

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 82.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.42		mg/Kg	☆	10/22/13 12:29	10/22/13 16:38	10
Barium	130		0.17		mg/Kg	☆	10/22/13 12:29	10/22/13 16:38	10
Cadmium	ND		0.17		mg/Kg	☆	10/22/13 12:29	10/22/13 16:38	10
Chromium	18		0.17		mg/Kg	☆	10/22/13 12:29	10/22/13 16:38	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10		%			10/14/13 12:58	1
Percent Moisture	17		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS11-100913

Lab Sample ID: 580-40825-6

Date Collected: 10/09/13 13:10

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 81.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.49		mg/Kg	☆	10/22/13 12:29	10/22/13 16:42	10
Barium	230		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 16:42	10
Cadmium	0.34		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 16:42	10
Chromium	29		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 16:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10		%			10/14/13 12:58	1
Percent Moisture	19		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS12-100913

Lab Sample ID: 580-40825-7

Date Collected: 10/09/13 13:20

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	15		0.43		mg/Kg	☆	10/22/13 12:29	10/22/13 16:47	10
Barium	180		0.17		mg/Kg	☆	10/22/13 12:29	10/22/13 16:47	10
Cadmium	0.50		0.17		mg/Kg	☆	10/22/13 12:29	10/22/13 16:47	10
Chromium	30		0.17		mg/Kg	☆	10/22/13 12:29	10/22/13 16:47	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			10/14/13 12:58	1
Percent Moisture	14		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW10-100913

Lab Sample ID: 580-40825-8

Date Collected: 10/09/13 10:15

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.1		0.37		mg/Kg	☆	10/22/13 12:29	10/22/13 16:51	10
Barium	100		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 16:51	10
Cadmium	0.23		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 16:51	10
Chromium	13		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 16:51	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/14/13 12:58	1
Percent Moisture	10		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW11-100913

Lab Sample ID: 580-40825-9

Date Collected: 10/09/13 10:05

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 91.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2		0.54		mg/Kg	☆	10/22/13 12:29	10/22/13 16:55	10
Barium	64		0.22		mg/Kg	☆	10/22/13 12:29	10/22/13 16:55	10
Cadmium	0.27		0.22		mg/Kg	☆	10/22/13 12:29	10/22/13 16:55	10
Chromium	26		0.22		mg/Kg	☆	10/22/13 12:29	10/22/13 16:55	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/14/13 12:58	1
Percent Moisture	8.6		0.10		%			10/14/13 12:58	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW12-100913

Lab Sample ID: 580-40825-10

Date Collected: 10/09/13 10:50

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.6		0.45		mg/Kg	☆	10/22/13 12:29	10/22/13 16:59	10
Barium	160		0.18		mg/Kg	☆	10/22/13 12:29	10/22/13 16:59	10
Cadmium	0.18		0.18		mg/Kg	☆	10/22/13 12:29	10/22/13 16:59	10
Chromium	17		0.18		mg/Kg	☆	10/22/13 12:29	10/22/13 16:59	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			10/14/13 12:58	1
Percent Moisture	14		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW13-100913

Lab Sample ID: 580-40825-11

Date Collected: 10/09/13 11:15

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.4		0.47		mg/Kg	☆	10/22/13 12:29	10/22/13 17:03	10
Barium	92		0.19		mg/Kg	☆	10/22/13 12:29	10/22/13 17:03	10
Cadmium	0.53		0.19		mg/Kg	☆	10/22/13 12:29	10/22/13 17:03	10
Chromium	3100		0.19		mg/Kg	☆	10/22/13 12:29	10/22/13 17:03	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/14/13 12:58	1
Percent Moisture	11		0.10		%			10/14/13 12:58	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW14-100913

Lab Sample ID: 580-40825-12

Date Collected: 10/09/13 11:20

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 87.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		0.53		mg/Kg	☆	10/22/13 12:29	10/22/13 17:16	10
Barium	140		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 17:16	10
Cadmium	ND		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 17:16	10
Chromium	15		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 17:16	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			10/14/13 12:58	1
Percent Moisture	13		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW15-100913

Lab Sample ID: 580-40825-13

Date Collected: 10/09/13 12:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7		0.37		mg/Kg	☆	10/22/13 12:29	10/22/13 17:20	10
Barium	120		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 17:20	10
Cadmium	ND		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 17:20	10
Chromium	4.6		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 17:20	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/14/13 12:58	1
Percent Moisture	11		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW16-100913

Lab Sample ID: 580-40825-14

Date Collected: 10/09/13 12:55

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		0.53		mg/Kg	☆	10/22/13 12:29	10/22/13 17:25	10
Barium	240		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 17:25	10
Cadmium	0.81		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 17:25	10
Chromium	38		0.21		mg/Kg	☆	10/22/13 12:29	10/22/13 17:25	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			10/14/13 12:58	1
Percent Moisture	15		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW17-100913

Lab Sample ID: 580-40825-15

Date Collected: 10/09/13 13:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.4		0.50		mg/Kg	☆	10/22/13 12:29	10/22/13 17:29	10
Barium	88		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 17:29	10
Cadmium	ND		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 17:29	10
Chromium	4.4		0.20		mg/Kg	☆	10/22/13 12:29	10/22/13 17:29	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/14/13 12:58	1
Percent Moisture	11		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW18-100913

Lab Sample ID: 580-40825-16

Date Collected: 10/09/13 13:15

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 93.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.38		mg/Kg	☆	10/22/13 12:29	10/22/13 17:33	10
Barium	180		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 17:33	10
Cadmium	ND		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 17:33	10
Chromium	12		0.15		mg/Kg	☆	10/22/13 12:29	10/22/13 17:33	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			10/14/13 12:58	1
Percent Moisture	6.4		0.10		%			10/14/13 12:58	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW19-100913

Lab Sample ID: 580-40825-17

Date Collected: 10/09/13 13:25

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 92.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.98		0.36		mg/Kg	☆	10/22/13 12:29	10/22/13 17:37	10
Barium	62		0.14		mg/Kg	☆	10/22/13 12:29	10/22/13 17:37	10
Cadmium	ND		0.14		mg/Kg	☆	10/22/13 12:29	10/22/13 17:37	10
Chromium	3.2		0.14		mg/Kg	☆	10/22/13 12:29	10/22/13 17:37	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			10/14/13 12:58	1
Percent Moisture	7.3		0.10		%			10/14/13 12:58	1

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-RB1-100913

Lab Sample ID: 580-40825-18

Date Collected: 10/09/13 13:50

Matrix: Water

Date Received: 10/10/13 09:25

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 22:27	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 22:27	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:27	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 22:27	5

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147762/22-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/22/13 12:29	10/22/13 15:47	10
Barium	ND		0.20		mg/Kg		10/22/13 12:29	10/22/13 15:47	10
Cadmium	ND		0.20		mg/Kg		10/22/13 12:29	10/22/13 15:47	10
Chromium	ND		0.20		mg/Kg		10/22/13 12:29	10/22/13 15:47	10

Lab Sample ID: LCS 580-147762/23-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	202		mg/Kg		101	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.69		mg/Kg		94	80 - 120
Chromium	20.0	19.9		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 580-147762/24-A
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147762

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	200		mg/Kg		100	80 - 120	1	20
Barium	200	193		mg/Kg		96	80 - 120	1	20
Cadmium	5.00	4.51		mg/Kg		90	80 - 120	4	20
Chromium	20.0	19.7		mg/Kg		99	80 - 120	1	20

Lab Sample ID: 580-40825-1 MS
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-BS7-100913
Prep Type: Total/NA
Prep Batch: 147762

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	7.0		183	192		mg/Kg	✱	101	80 - 120
Barium	120		183	340		mg/Kg	✱	117	80 - 120
Cadmium	ND		4.58	4.35		mg/Kg	✱	92	80 - 120
Chromium	12		18.3	31.6		mg/Kg	✱	106	80 - 120

Lab Sample ID: 580-40825-1 MSD
Matrix: Solid
Analysis Batch: 147786

Client Sample ID: YO-BS7-100913
Prep Type: Total/NA
Prep Batch: 147762

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	7.0		215	227		mg/Kg	✱	103	80 - 120	17	20
Barium	120		215	381		mg/Kg	✱	119	80 - 120	11	20
Cadmium	ND		5.37	5.38	F	mg/Kg	✱	98	80 - 120	21	20
Chromium	12		21.5	34.5		mg/Kg	✱	104	80 - 120	9	20

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40825-1 DU

Matrix: Solid

Analysis Batch: 147786

Client Sample ID: YO-BS7-100913

Prep Type: Total/NA

Prep Batch: 147762

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	7.0		7.06		mg/Kg	☼	0.7	20
Barium	120		126		mg/Kg	☼	0.6	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	12		12.2		mg/Kg	☼	0.1	20

Lab Sample ID: MB 580-147239/19-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0050		mg/L		10/14/13 17:41	10/15/13 18:17	5
Barium	ND		0.0060		mg/L		10/14/13 17:41	10/15/13 18:17	5
Cadmium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5
Chromium	ND		0.0020		mg/L		10/14/13 17:41	10/15/13 18:17	5

Lab Sample ID: LCS 580-147239/20-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Arsenic	4.00	4.04		mg/L		101	80 - 120	
Barium	4.00	3.96		mg/L		99	80 - 120	
Cadmium	0.100	0.0951		mg/L		95	80 - 120	
Chromium	0.400	0.389		mg/L		97	80 - 120	

Lab Sample ID: LCSD 580-147239/21-A

Matrix: Water

Analysis Batch: 147327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 147239

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD	Limit	
Arsenic	4.00	4.08		mg/L		102	80 - 120	1	20	
Barium	4.00	3.99		mg/L		100	80 - 120	1	20	
Cadmium	0.100	0.0952		mg/L		95	80 - 120	0	20	
Chromium	0.400	0.389		mg/L		97	80 - 120	0	20	

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40825-1 DU

Matrix: Solid

Analysis Batch: 147204

Client Sample ID: YO-BS7-100913

Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	88		85		%		3	20
Percent Moisture	12		15		%		20	20

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS7-100913

Lab Sample ID: 580-40825-1

Date Collected: 10/09/13 10:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 15:56	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-BS8-100913

Lab Sample ID: 580-40825-2

Date Collected: 10/09/13 11:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:26	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-BS108-100913

Lab Sample ID: 580-40825-3

Date Collected: 10/09/13 11:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:30	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-BS9-100913

Lab Sample ID: 580-40825-4

Date Collected: 10/09/13 11:30

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:34	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-BS10-100913

Lab Sample ID: 580-40825-5

Date Collected: 10/09/13 11:55

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:38	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-BS11-100913

Lab Sample ID: 580-40825-6

Date Collected: 10/09/13 13:10

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:42	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-BS12-100913

Lab Sample ID: 580-40825-7

Date Collected: 10/09/13 13:20

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:47	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW10-100913

Lab Sample ID: 580-40825-8

Date Collected: 10/09/13 10:15

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:51	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW11-100913

Lab Sample ID: 580-40825-9

Date Collected: 10/09/13 10:05

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:55	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW12-100913

Lab Sample ID: 580-40825-10

Date Collected: 10/09/13 10:50

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 16:59	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW13-100913

Lab Sample ID: 580-40825-11

Date Collected: 10/09/13 11:15

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:03	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW14-100913

Lab Sample ID: 580-40825-12

Date Collected: 10/09/13 11:20

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:16	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW15-100913

Lab Sample ID: 580-40825-13

Date Collected: 10/09/13 12:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:20	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW16-100913

Lab Sample ID: 580-40825-14

Date Collected: 10/09/13 12:55

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:25	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW17-100913

Lab Sample ID: 580-40825-15

Date Collected: 10/09/13 13:00

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:29	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Client Sample ID: YO-SW18-100913

Lab Sample ID: 580-40825-16

Date Collected: 10/09/13 13:15

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:33	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-SW19-100913

Lab Sample ID: 580-40825-17

Date Collected: 10/09/13 13:25

Matrix: Solid

Date Received: 10/10/13 09:25

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			147762	10/22/13 12:29	PAB	TAL SEA
Total/NA	Analysis	6020		10	147786	10/22/13 17:37	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147204	10/14/13 12:58	JJP	TAL SEA

Client Sample ID: YO-RB1-100913

Lab Sample ID: 580-40825-18

Date Collected: 10/09/13 13:50

Matrix: Water

Date Received: 10/10/13 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			147239	10/14/13 17:41	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	147327	10/15/13 22:27	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40825-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40825-1	YO-BS7-100913	Solid	10/09/13 10:00	10/10/13 09:25
580-40825-2	YO-BS8-100913	Solid	10/09/13 11:00	10/10/13 09:25
580-40825-3	YO-BS108-100913	Solid	10/09/13 11:00	10/10/13 09:25
580-40825-4	YO-BS9-100913	Solid	10/09/13 11:30	10/10/13 09:25
580-40825-5	YO-BS10-100913	Solid	10/09/13 11:55	10/10/13 09:25
580-40825-6	YO-BS11-100913	Solid	10/09/13 13:10	10/10/13 09:25
580-40825-7	YO-BS12-100913	Solid	10/09/13 13:20	10/10/13 09:25
580-40825-8	YO-SW10-100913	Solid	10/09/13 10:15	10/10/13 09:25
580-40825-9	YO-SW11-100913	Solid	10/09/13 10:05	10/10/13 09:25
580-40825-10	YO-SW12-100913	Solid	10/09/13 10:50	10/10/13 09:25
580-40825-11	YO-SW13-100913	Solid	10/09/13 11:15	10/10/13 09:25
580-40825-12	YO-SW14-100913	Solid	10/09/13 11:20	10/10/13 09:25
580-40825-13	YO-SW15-100913	Solid	10/09/13 12:00	10/10/13 09:25
580-40825-14	YO-SW16-100913	Solid	10/09/13 12:55	10/10/13 09:25
580-40825-15	YO-SW17-100913	Solid	10/09/13 13:00	10/10/13 09:25
580-40825-16	YO-SW18-100913	Solid	10/09/13 13:15	10/10/13 09:25
580-40825-17	YO-SW19-100913	Solid	10/09/13 13:25	10/10/13 09:25
580-40825-18	YO-RB1-100913	Water	10/09/13 13:50	10/10/13 09:25

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

Regulatory Program: DJW IMPSS RCRA CERCLA MCL

Project Manager: Howard Young
Tel/Fax: 206-419-8629/253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Date: 10/9/13

4825

TestAmerica Laboratories, Inc.

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

Client Contact		Project Manager: Howard Young		Site Contact: Howard Young		Date: 10/9/13		COC No: 1 of 2 COCs				
BNSF Sheppard		Tel/Fax: 206-419-8629/253-952-3435		Lab Contact: Kris Allen		Carrier:		Sampler: 1 of 2 COCs				
BNSF Railway		Analysis Turnaround Time		Carrier:		Job / SDG No.:		For Lab Use Only: Walk-in Client Lab Sampling:				
2454 Occidental Avenue South, Suite 1A		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS		Carrier:		Sample Specific Notes:						
Seattle, Washington 98134-1451		TAT if different from Below: <u>5</u> <u>STO TAT</u>		Carrier:								
Project Name: Parkwater RA		2 weeks		Carrier:								
Site: Parkwater, Spokane, WA		1 week		Carrier:								
P O # BNSF Direct Bill Work Order No. TT0101-N10		2 days		Carrier:								
		1 day		Carrier:								
Sample Identification		Sample Date	Sample Time	Sample Type (C-Comp, G-Gen)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Heavy Metals (As, Pb, Cd, Cr, Ba, Hg, Co, Ag, Ni, Mn, Cu, Zn)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)
Y0-B57-100913	1	10/9/13	1000	G	S	1	✓	✓	✓	✓	✓	✓
Y0-B58-100913	2	10/9/13	1100	G	S	1	✓	✓	✓	✓	✓	✓
Y0-B5108-100913	3		1100	G	S	1	✓	✓	✓	✓	✓	✓
Y0-B59-100913	4		1130	G	S	1	✓	✓	✓	✓	✓	✓
Y0-B510-100913	5		1155	G	S	1	✓	✓	✓	✓	✓	✓
Y0-B511-100913	6		1310	G	S	1	✓	✓	✓	✓	✓	✓
Y0-B512-100913	7		1320	G	S	1	✓	✓	✓	✓	✓	✓
Y0-SW10-100913	8		1015	G	S	1	✓	✓	✓	✓	✓	✓
Y0-SW11-100913	9		1005	G	S	1	✓	✓	✓	✓	✓	✓
Y0-SW12-100913	10		1050	G	S	1	✓	✓	✓	✓	✓	✓
Y0-SW13-100913	11		1115	G	S	1	✓	✓	✓	✓	✓	✓



Cooler/TB DigIR cor 3.5 unc 3.7
Cooler Dsc hobbed @ Lab
WetPacks, Packing bubble
by Co. Feller P.O.

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

Regulatory Program: DW NPDES RCRA **EMTEA MTLA**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact Bruce Sheppard BNSF Railway 2454 Occidental Avenue South, Suite 1A Seattle, Washington 98134-1451		Project Manager: Howard Young Tel/Fax: 206-419-8629/253-952-3435		Site Contact: Howard Young Lab Contact: Kris Allen		Date: 10/29/13		COC No: 2 of 2 COCs			
Project Name: Parkwater RA Site: Parkwater, Spokane, WA P O # BNSF Direct Bill Work Order No. TT0101-N10		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below: <u>3 days</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day STD TAT		Filtered Sample (Y/N) Perform MS/MSD (Y/N) Heavy Metals (As, Pb, Cd, Cr, Ba, Hg, Cu, Ni, Zn, Mn/6020) <u>L Tab 1</u>		Semivolatile Organics (8270)		PCBs (8082)		Volatile Organic Compounds (8260)	
Sample Identification		Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Carrier:		Sampler: For Lab Use Only: Walk-in Client Lab Sampling: Job / SDG No.:		
Y0-SW14-100913	12	10/9/13	1120	G	S	1			Sample Specific Notes:		
Y0-SW15-100913	13		1200								
Y0-SW16-100913	14		1255								
Y0-SW17-100913	15		1300								
Y0-SW18-100913	16		1315								
Y0-SW19-100913	17		1325		W						
Y0-RB1-100913	18		1350		W						

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40825-1

Login Number: 40825

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

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.	N/A	
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?	N/A	Not requested on COC.
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Ralston Lead Track

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40333-1

Client Project/Site: Parkwater Remedial Action
Revision: 1

For:

Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young



Authorized for release by:
4/1/2015 10:30:19 AM

Kim Presley, Project Management Assistant I
(253)922-2310
kim.presley@testamericainc.com

Designee for

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Job ID: 580-40333-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-40333-1

Comments

No additional comments.

Receipt

The samples were received on 9/18/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

GC Semi VOA

Method(s) NWTPH-Dx: In analytical batch 145322, the method blank for preparation batch 145227 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-BS1-091713

Lab Sample ID: 580-40333-1

Date Collected: 09/17/13 11:45

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 91.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.8		0.51		mg/Kg	✱	09/18/13 10:33	09/18/13 21:17	10
Barium	56		0.20		mg/Kg	✱	09/18/13 10:33	09/18/13 21:17	10
Cadmium	ND		0.20		mg/Kg	✱	09/18/13 10:33	09/18/13 21:17	10
Chromium	14		0.20		mg/Kg	✱	09/18/13 10:33	09/18/13 21:17	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/18/13 13:18	1
Percent Moisture	9.0		0.10		%			09/18/13 13:18	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW1-091713

Lab Sample ID: 580-40333-2

Date Collected: 09/17/13 11:46

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 90.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.9		0.55		mg/Kg	✱	09/18/13 10:33	09/18/13 21:21	10
Barium	95		0.22		mg/Kg	✱	09/18/13 10:33	09/18/13 21:21	10
Cadmium	ND		0.22		mg/Kg	✱	09/18/13 10:33	09/18/13 21:21	10
Chromium	14		0.22		mg/Kg	✱	09/18/13 10:33	09/18/13 21:21	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/18/13 13:18	1
Percent Moisture	9.7		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW2-091713

Lab Sample ID: 580-40333-3

Date Collected: 09/17/13 11:47

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 91.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.1		0.46		mg/Kg	✱	09/18/13 10:33	09/18/13 21:33	10
Barium	84		0.19		mg/Kg	✱	09/18/13 10:33	09/18/13 21:33	10
Cadmium	ND		0.19		mg/Kg	✱	09/18/13 10:33	09/18/13 21:33	10
Chromium	15		0.19		mg/Kg	✱	09/18/13 10:33	09/18/13 21:33	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			09/18/13 13:18	1
Percent Moisture	8.2		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW3-091713

Lab Sample ID: 580-40333-4

Date Collected: 09/17/13 12:16

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 89.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.49		mg/Kg	☼	09/18/13 10:33	09/18/13 21:37	10
Barium	120		0.19		mg/Kg	☼	09/18/13 10:33	09/18/13 21:37	10
Cadmium	ND		0.19		mg/Kg	☼	09/18/13 10:33	09/18/13 21:37	10
Chromium	19		0.19		mg/Kg	☼	09/18/13 10:33	09/18/13 21:37	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/18/13 13:18	1
Percent Moisture	11		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW4-091713

Lab Sample ID: 580-40333-5

Date Collected: 09/17/13 13:45

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 91.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.47		mg/Kg	☼	09/18/13 10:33	09/18/13 21:41	10
Barium	110		0.19		mg/Kg	☼	09/18/13 10:33	09/18/13 21:41	10
Cadmium	ND		0.19		mg/Kg	☼	09/18/13 10:33	09/18/13 21:41	10
Chromium	17		0.19		mg/Kg	☼	09/18/13 10:33	09/18/13 21:41	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/18/13 13:18	1
Percent Moisture	9.0		0.10		%			09/18/13 13:18	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW5-091713

Lab Sample ID: 580-40333-6

Date Collected: 09/17/13 13:50

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 90.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.7		0.50		mg/Kg	✱	09/18/13 10:33	09/18/13 21:45	10
Barium	100		0.20		mg/Kg	✱	09/18/13 10:33	09/18/13 21:45	10
Cadmium	ND		0.20		mg/Kg	✱	09/18/13 10:33	09/18/13 21:45	10
Chromium	16		0.20		mg/Kg	✱	09/18/13 10:33	09/18/13 21:45	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/18/13 13:18	1
Percent Moisture	9.4		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW6-091713

Lab Sample ID: 580-40333-7

Date Collected: 09/17/13 14:05

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 90.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.7		0.50		mg/Kg	☼	09/18/13 10:33	09/18/13 21:49	10
Barium	120		0.20		mg/Kg	☼	09/18/13 10:33	09/18/13 21:49	10
Cadmium	ND		0.20		mg/Kg	☼	09/18/13 10:33	09/18/13 21:49	10
Chromium	17		0.20		mg/Kg	☼	09/18/13 10:33	09/18/13 21:49	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/18/13 13:18	1
Percent Moisture	9.8		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-BS2-091713

Lab Sample ID: 580-40333-8

Date Collected: 09/17/13 13:55

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 94.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.6		0.50		mg/Kg	☼	09/18/13 10:33	09/18/13 21:53	10
Barium	56		0.20		mg/Kg	☼	09/18/13 10:33	09/18/13 21:53	10
Cadmium	ND		0.20		mg/Kg	☼	09/18/13 10:33	09/18/13 21:53	10
Chromium	15		0.20		mg/Kg	☼	09/18/13 10:33	09/18/13 21:53	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			09/18/13 13:18	1
Percent Moisture	5.6		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-BS102-091713

Lab Sample ID: 580-40333-9

Date Collected: 09/17/13 13:57

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 94.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.4		0.41		mg/Kg	☼	09/18/13 10:33	09/18/13 21:58	10
Barium	51		0.16		mg/Kg	☼	09/18/13 10:33	09/18/13 21:58	10
Cadmium	ND		0.16		mg/Kg	☼	09/18/13 10:33	09/18/13 21:58	10
Chromium	9.1		0.16		mg/Kg	☼	09/18/13 10:33	09/18/13 21:58	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10		%			09/18/13 13:18	1
Percent Moisture	5.3		0.10		%			09/18/13 13:18	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-RB1-091713

Lab Sample ID: 580-40333-10

Date Collected: 09/17/13 12:45

Matrix: Water

Date Received: 09/18/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		09/18/13 13:09	09/19/13 14:02	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		09/18/13 13:09	09/19/13 14:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				09/18/13 13:09	09/19/13 14:02	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/18/13 18:02	09/19/13 11:10	5
Barium	ND		0.0060		mg/L		09/18/13 18:02	09/19/13 11:10	5
Cadmium	ND		0.0020		mg/L		09/18/13 18:02	09/19/13 11:10	5
Chromium	ND		0.0020		mg/L		09/18/13 18:02	09/19/13 11:10	5
Lead	ND		0.0020		mg/L		09/18/13 18:02	09/19/13 11:10	5

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-145228/22-A
Matrix: Solid
Analysis Batch: 145312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/18/13 10:33	09/18/13 19:55	10
Barium	ND		0.20		mg/Kg		09/18/13 10:33	09/18/13 19:55	10
Cadmium	ND		0.20		mg/Kg		09/18/13 10:33	09/18/13 19:55	10
Chromium	ND		0.20		mg/Kg		09/18/13 10:33	09/18/13 19:55	10

Lab Sample ID: LCS 580-145228/23-A
Matrix: Solid
Analysis Batch: 145312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	196		mg/Kg		98	80 - 120
Barium	200	191		mg/Kg		95	80 - 120
Cadmium	5.00	4.18		mg/Kg		84	80 - 120
Chromium	20.0	19.9		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 580-145228/24-A
Matrix: Solid
Analysis Batch: 145312

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145228

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	195		mg/Kg		98	80 - 120	0	20
Barium	200	189		mg/Kg		95	80 - 120	1	20
Cadmium	5.00	4.27		mg/Kg		85	80 - 120	2	20
Chromium	20.0	19.6		mg/Kg		98	80 - 120	2	20

Lab Sample ID: LCSSRM 580-145228/25-A
Matrix: Solid
Analysis Batch: 145312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145228

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	237	251		mg/Kg		106.1	71.3 - 129.1
Barium	252	255		mg/Kg		101.4	73.8 - 126.2
Cadmium	191	191		mg/Kg		99.9	73.3 - 126.7
Chromium	128	132		mg/Kg		103.5	65.5 - 129.7

Lab Sample ID: MB 580-145287/12-A
Matrix: Water
Analysis Batch: 145383

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 145287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/18/13 18:02	09/19/13 10:16	5
Barium	ND		0.0060		mg/L		09/18/13 18:02	09/19/13 10:16	5
Cadmium	ND		0.0020		mg/L		09/18/13 18:02	09/19/13 10:16	5
Chromium	ND		0.0020		mg/L		09/18/13 18:02	09/19/13 10:16	5
Lead	ND		0.0020		mg/L		09/18/13 18:02	09/19/13 10:16	5

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-145287/13-A
Matrix: Water
Analysis Batch: 145383

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.03		mg/L		101	80 - 120
Barium	4.00	3.88		mg/L		97	80 - 120
Cadmium	0.100	0.0936		mg/L		94	80 - 120
Chromium	0.400	0.405		mg/L		101	80 - 120
Lead	1.00	0.982		mg/L		98	80 - 120

Lab Sample ID: LCSD 580-145287/14-A
Matrix: Water
Analysis Batch: 145383

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 145287

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.02		mg/L		101	80 - 120	0	20
Barium	4.00	3.93		mg/L		98	80 - 120	1	20
Cadmium	0.100	0.0913		mg/L		91	80 - 120	2	20
Chromium	0.400	0.402		mg/L		101	80 - 120	1	20
Lead	1.00	0.989		mg/L		99	80 - 120	1	20

Lab Sample ID: LCSSRM 580-145287/15-A
Matrix: Water
Analysis Batch: 145383

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145287

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.06		mg/L		102	80 - 120
Barium	4.00	3.97		mg/L		99	80 - 120
Cadmium	0.100	0.0922		mg/L		92	80 - 120
Chromium	0.400	0.410		mg/L		103	80 - 120
Lead	1.00	0.992		mg/L		99	80 - 120

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-BS1-091713

Lab Sample ID: 580-40333-1

Date Collected: 09/17/13 11:45

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:17	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-SW1-091713

Lab Sample ID: 580-40333-2

Date Collected: 09/17/13 11:46

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:21	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-SW2-091713

Lab Sample ID: 580-40333-3

Date Collected: 09/17/13 11:47

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:33	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-SW3-091713

Lab Sample ID: 580-40333-4

Date Collected: 09/17/13 12:16

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:37	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-SW4-091713

Lab Sample ID: 580-40333-5

Date Collected: 09/17/13 13:45

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:41	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Client Sample ID: RLT-SW5-091713

Lab Sample ID: 580-40333-6

Date Collected: 09/17/13 13:50

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:45	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-SW6-091713

Lab Sample ID: 580-40333-7

Date Collected: 09/17/13 14:05

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:49	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-BS2-091713

Lab Sample ID: 580-40333-8

Date Collected: 09/17/13 13:55

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:53	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-BS102-091713

Lab Sample ID: 580-40333-9

Date Collected: 09/17/13 13:57

Matrix: Solid

Date Received: 09/18/13 09:30

Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145228	09/18/13 10:33	PAB	TAL SEA
Total/NA	Analysis	6020		10	145312	09/18/13 21:58	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145254	09/18/13 13:18	PAB	TAL SEA

Client Sample ID: RLT-RB1-091713

Lab Sample ID: 580-40333-10

Date Collected: 09/17/13 12:45

Matrix: Water

Date Received: 09/18/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145227	09/18/13 13:09	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	145322	09/19/13 14:02	JL1	TAL SEA
Total Recoverable	Prep	3005A			145287	09/18/13 18:02	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	145383	09/19/13 11:10	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-16
California	State Program	9	2901	01-31-17
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
US Fish & Wildlife	Federal		LE192332-0	02-28-16
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-16

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater Remedial Action

TestAmerica Job ID: 580-40333-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40333-1	RLT-BS1-091713	Solid	09/17/13 11:45	09/18/13 09:30
580-40333-2	RLT-SW1-091713	Solid	09/17/13 11:46	09/18/13 09:30
580-40333-3	RLT-SW2-091713	Solid	09/17/13 11:47	09/18/13 09:30
580-40333-4	RLT-SW3-091713	Solid	09/17/13 12:16	09/18/13 09:30
580-40333-5	RLT-SW4-091713	Solid	09/17/13 13:45	09/18/13 09:30
580-40333-6	RLT-SW5-091713	Solid	09/17/13 13:50	09/18/13 09:30
580-40333-7	RLT-SW6-091713	Solid	09/17/13 14:05	09/18/13 09:30
580-40333-8	RLT-BS2-091713	Solid	09/17/13 13:55	09/18/13 09:30
580-40333-9	RLT-BS102-091713	Solid	09/17/13 13:57	09/18/13 09:30
580-40333-10	RLT-RB1-091713	Water	09/17/13 12:45	09/18/13 09:30



580-40333 Chain of Custody

CHAIN OF CUSTODY
BNSF PROJECT INFORMATION

Project State of Origin: **Washington**

LABORATORY INFORMATION		LAB WORK ORDER: 70333	
Project Manager:		SHIPMENT INFORMATION	
Phone:		Shipment Method:	
Fax:		Tracking Number:	
CONSULTANT INFORMATION		Project Number:	

BNSF Project Number: **139U110.04** Project City: **Spokane** Company: **Kennedy Jenks Consultants** Project Manager: **Howard Young**

BNSF Project Name: **PAK WATER REMEDIAL ACTION** Address: **32601 37th AVE S, Suite 100** Email: **Howard Young @ KennedyJenks.com**

BNSF Contact: **BRUCE SHEPP** BNSF Work Order No.: **TT0101-NID** City/State/Zip: **Federal Way, WA 98001** Phone: **(253) 835-4400** Fax: **(253) 952-3435**

TURNAROUND TIME

1-day Rush 5-10 8-day Rush BNSF Standard (Level II) Other Deliverables? **KJ Custom EDD**

2-day Rush Standard 10-Day Level III EDD Req. Format? Level IV

3-day Rush Other _____

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type (Comp/Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
1. RLT-BS1-091713	1	9/17/13	1145	HY	N	G	X	EPA 6020 DE		1
2. RLT-SW1-091713	1	9/17/13	1146	HY	N	S	X	As, Cd, Total Cr, & Ba by EPA 6020		2
3. RLT-SW2-091713	1	9/17/13	1147	HY	N	S	X	As, Cd, Bay, Total Cr, Pb, TPH - DEX, TPH - DEX		3
4. RLT-SW3-091713	1	9/17/13	1216	HY	N	S	X	NWTPH - DX (DIESEL, OIL)		4
5. RLT-SW4-091713	1	9/17/13	1345	HY	N	S	X			5
6. RLT-SW5-091713	1	9/17/13	1350	HY	N	S	X			6
7. RLT-SW16-091713	1	9/17/13	1465	HY	N	S	X			7
8. RLT-BS1-091713	1	9/17/13	1355	HY	N	S	X			8
9. RLT-BS102-091713	1	9/17/13	1357	HY	N	S	X			9
10. RLT-RB1-091713	3	9/17/13	1245	HY	N	G W	X			10

11. **Cooler/TB Dig/IR cor. 16 unch**

12. **Cooler Disc @ Lab**

13. **Wet Packs Packing 16/16**

14. **W/O CS. FedEx P/D.**

15. **Reinforced by [Signature]**

Reinforced By: **[Signature]** Date/Time: **9/17/13 1533** Receiver/By: **[Signature]**

Reinforced By: **[Signature]** Date/Time: **9/17/13 15:50** Receiver/By: **[Signature]**

Reinforced By: **[Signature]** Date/Time: **9/17/13 15:50** Receiver/By: **[Signature]**

Received by Laboratory: _____ Date/Time: _____ Lab Remarks: _____

Lab Custody Inact? Yes No

Custody Seal No.: _____ BNSF COC No.: _____

Comments and Special Analytical Requirements:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (06/08)

Temperature readings: Unloaded onto a cart in walk-in 4.8°C @ 10:45 - put away @ 10:55

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
RLT-RBI-091713	580-40333-A-10	Amber Glass 1 liter - Hydrochloric	1.5		
RLT-RBI-091713	580-40333-B-10	Amber Glass 1 liter - Hydrochloric	1.5		
RLT-RBI-091713	580-40333-C-10	Plastic 250ml - with Nitric Acid	1.0		



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40333-1

Login Number: 40333

List Number: 1

Creator: Gamble, Cathy L

List Source: TestAmerica Seattle

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.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not present
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40352-1
Client Project/Site: Parkwater

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Howard Young



Authorized for release by:
9/20/2013 1:11:23 PM
David Alltucker, Project Manager I
david.alltucker@testamericainc.com
Designee for
Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Job ID: 580-40352-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-40352-1

Receipt

The samples were received on 9/19/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 145366 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.



Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-BS3-091713

Lab Sample ID: 580-40352-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	11		0.48		mg/Kg	10	☼	6020	Total/NA
Barium	43		0.19		mg/Kg	10	☼	6020	Total/NA
Chromium	9.7		0.19		mg/Kg	10	☼	6020	Total/NA

Client Sample ID: RLT-SW7-091713

Lab Sample ID: 580-40352-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.8		0.47		mg/Kg	10	☼	6020	Total/NA
Barium	110		0.19		mg/Kg	10	☼	6020	Total/NA
Chromium	16		0.19		mg/Kg	10	☼	6020	Total/NA

Client Sample ID: RLT-SW8-091713

Lab Sample ID: 580-40352-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.9		0.41		mg/Kg	10	☼	6020	Total/NA
Barium	46		0.16		mg/Kg	10	☼	6020	Total/NA
Chromium	9.4		0.16		mg/Kg	10	☼	6020	Total/NA

Client Sample ID: RLT-SW9-091713

Lab Sample ID: 580-40352-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.2		0.49		mg/Kg	10	☼	6020	Total/NA
Barium	34		0.19		mg/Kg	10	☼	6020	Total/NA
Chromium	8.4		0.19		mg/Kg	10	☼	6020	Total/NA

Client Sample ID: RLT-SW10 -091713

Lab Sample ID: 580-40352-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.4		0.50		mg/Kg	10	☼	6020	Total/NA
Barium	150		0.20		mg/Kg	10	☼	6020	Total/NA
Chromium	17		0.20		mg/Kg	10	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Seattle

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-BS3-091713

Lab Sample ID: 580-40352-1

Date Collected: 09/17/13 15:35

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 94.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		0.48		mg/Kg	✱	09/19/13 12:32	09/20/13 08:41	10
Barium	43		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:41	10
Cadmium	ND		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:41	10
Chromium	9.7		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:41	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10		%			09/19/13 14:23	1
Percent Moisture	5.2		0.10		%			09/19/13 14:23	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-SW7-091713

Lab Sample ID: 580-40352-2

Date Collected: 09/17/13 16:10

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 90.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.8		0.47		mg/Kg	✱	09/19/13 12:32	09/20/13 08:45	10
Barium	110		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:45	10
Cadmium	ND		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:45	10
Chromium	16		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:45	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/19/13 14:23	1
Percent Moisture	9.5		0.10		%			09/19/13 14:23	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-SW8-091713

Lab Sample ID: 580-40352-3

Date Collected: 09/17/13 16:15

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 93.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.9		0.41		mg/Kg	✱	09/19/13 12:32	09/20/13 08:49	10
Barium	46		0.16		mg/Kg	✱	09/19/13 12:32	09/20/13 08:49	10
Cadmium	ND		0.16		mg/Kg	✱	09/19/13 12:32	09/20/13 08:49	10
Chromium	9.4		0.16		mg/Kg	✱	09/19/13 12:32	09/20/13 08:49	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			09/19/13 14:23	1
Percent Moisture	6.5		0.10		%			09/19/13 14:23	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-SW9-091713

Lab Sample ID: 580-40352-4

Date Collected: 09/17/13 16:20

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 94.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.2		0.49		mg/Kg	✱	09/19/13 12:32	09/20/13 08:53	10
Barium	34		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:53	10
Cadmium	ND		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:53	10
Chromium	8.4		0.19		mg/Kg	✱	09/19/13 12:32	09/20/13 08:53	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10		%			09/19/13 14:23	1
Percent Moisture	5.3		0.10		%			09/19/13 14:23	1



Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-SW10 -091713

Lab Sample ID: 580-40352-5

Date Collected: 09/17/13 16:25

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 90.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.4		0.50		mg/Kg	✱	09/19/13 12:32	09/20/13 08:57	10
Barium	150		0.20		mg/Kg	✱	09/19/13 12:32	09/20/13 08:57	10
Cadmium	ND		0.20		mg/Kg	✱	09/19/13 12:32	09/20/13 08:57	10
Chromium	17		0.20		mg/Kg	✱	09/19/13 12:32	09/20/13 08:57	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/19/13 14:23	1
Percent Moisture	9.5		0.10		%			09/19/13 14:23	1



QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-145366/19-A

Matrix: Solid

Analysis Batch: 145472

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 145366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/19/13 12:32	09/20/13 07:09	10
Barium	ND		0.20		mg/Kg		09/19/13 12:32	09/20/13 07:09	10
Cadmium	ND		0.20		mg/Kg		09/19/13 12:32	09/20/13 07:09	10
Chromium	ND		0.20		mg/Kg		09/19/13 12:32	09/20/13 07:09	10

Lab Sample ID: LCS 580-145366/20-A

Matrix: Solid

Analysis Batch: 145472

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	197		mg/Kg		99	80 - 120
Barium	200	194		mg/Kg		97	80 - 120
Cadmium	5.00	4.40		mg/Kg		88	80 - 120
Chromium	20.0	19.4		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-145366/21-A

Matrix: Solid

Analysis Batch: 145472

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 145366

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	201		mg/Kg		101	80 - 120	2	20
Barium	200	197		mg/Kg		99	80 - 120	2	20
Cadmium	5.00	4.30		mg/Kg		86	80 - 120	2	20
Chromium	20.0	19.7		mg/Kg		99	80 - 120	2	20

Lab Sample ID: LCSSRM 580-145366/22-A

Matrix: Solid

Analysis Batch: 145472

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145366

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	237	255		mg/Kg		107.4	71.3 - 129.1
Barium	252	262		mg/Kg		104.0	73.8 - 126.2
Cadmium	191	194		mg/Kg		101.6	73.3 - 126.7
Chromium	128	130		mg/Kg		101.6	65.5 - 129.7

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Metals

Prep Batch: 145366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-40352-1	RLT-BS3-091713	Total/NA	Solid	3050B	
580-40352-2	RLT-SW7-091713	Total/NA	Solid	3050B	
580-40352-3	RLT-SW8-091713	Total/NA	Solid	3050B	
580-40352-4	RLT-SW9-091713	Total/NA	Solid	3050B	
580-40352-5	RLT-SW10 -091713	Total/NA	Solid	3050B	
LCS 580-145366/20-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 580-145366/21-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 580-145366/22-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 580-145366/19-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 145472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-40352-1	RLT-BS3-091713	Total/NA	Solid	6020	145366
580-40352-2	RLT-SW7-091713	Total/NA	Solid	6020	145366
580-40352-3	RLT-SW8-091713	Total/NA	Solid	6020	145366
580-40352-4	RLT-SW9-091713	Total/NA	Solid	6020	145366
580-40352-5	RLT-SW10 -091713	Total/NA	Solid	6020	145366
LCS 580-145366/20-A	Lab Control Sample	Total/NA	Solid	6020	145366
LCSD 580-145366/21-A	Lab Control Sample Dup	Total/NA	Solid	6020	145366
LCSSRM 580-145366/22-A	Lab Control Sample	Total/NA	Solid	6020	145366
MB 580-145366/19-A	Method Blank	Total/NA	Solid	6020	145366

General Chemistry

Analysis Batch: 145378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-40352-1	RLT-BS3-091713	Total/NA	Solid	D 2216	
580-40352-2	RLT-SW7-091713	Total/NA	Solid	D 2216	
580-40352-3	RLT-SW8-091713	Total/NA	Solid	D 2216	
580-40352-4	RLT-SW9-091713	Total/NA	Solid	D 2216	
580-40352-5	RLT-SW10 -091713	Total/NA	Solid	D 2216	

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Client Sample ID: RLT-BS3-091713

Lab Sample ID: 580-40352-1

Date Collected: 09/17/13 15:35

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145366	09/19/13 12:32	PAB	TAL SEA
Total/NA	Analysis	6020		10	145472	09/20/13 08:41	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145378	09/19/13 14:23	PAB	TAL SEA

Client Sample ID: RLT-SW7-091713

Lab Sample ID: 580-40352-2

Date Collected: 09/17/13 16:10

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145366	09/19/13 12:32	PAB	TAL SEA
Total/NA	Analysis	6020		10	145472	09/20/13 08:45	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145378	09/19/13 14:23	PAB	TAL SEA

Client Sample ID: RLT-SW8-091713

Lab Sample ID: 580-40352-3

Date Collected: 09/17/13 16:15

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145366	09/19/13 12:32	PAB	TAL SEA
Total/NA	Analysis	6020		10	145472	09/20/13 08:49	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145378	09/19/13 14:23	PAB	TAL SEA

Client Sample ID: RLT-SW9-091713

Lab Sample ID: 580-40352-4

Date Collected: 09/17/13 16:20

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145366	09/19/13 12:32	PAB	TAL SEA
Total/NA	Analysis	6020		10	145472	09/20/13 08:53	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145378	09/19/13 14:23	PAB	TAL SEA

Client Sample ID: RLT-SW10 -091713

Lab Sample ID: 580-40352-5

Date Collected: 09/17/13 16:25

Matrix: Solid

Date Received: 09/19/13 09:30

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			145366	09/19/13 12:32	PAB	TAL SEA
Total/NA	Analysis	6020		10	145472	09/20/13 08:57	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	145378	09/19/13 14:23	PAB	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SEA
D 2216	Percent Moisture	ASTM	TAL SEA

Protocol References:

ASTM = ASTM International

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

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40352-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40352-1	RLT-BS3-091713	Solid	09/17/13 15:35	09/19/13 09:30
580-40352-2	RLT-SW7-091713	Solid	09/17/13 16:10	09/19/13 09:30
580-40352-3	RLT-SW8-091713	Solid	09/17/13 16:15	09/19/13 09:30
580-40352-4	RLT-SW9-091713	Solid	09/17/13 16:20	09/19/13 09:30
580-40352-5	RLT-SW10 -091713	Solid	09/17/13 16:25	09/19/13 09:30

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- 12
- 13
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CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 1390110.04

BNSF Project Name: PARKWAY

BNSF Contract: STACE SHEPARD

Project State of Origin: WASHINGTON

Project City: SPOKANE

BNSF Work Order No.: T10101-N10

Laboratory: Address: City/State/Zip: Phone: Fax:

CONSULTANT INFORMATION

Company: Kennedy Parks Consultants

Address: 32001 32nd Ave S Suite 100

City/State/Zip: Federal Way, WA 98001

Project Number: 1390110.04

Project Manager: Howard Young

Email: Howardyoung@kennedyparks.com

Phone: 253-855-6408 Fax: 253-952-3135

LABORATORY INFORMATION

SHIPMENT INFORMATION

LAB WORK ORDER: 90352

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables? **KJ Custom EDD**
 EDD Req. Format?

SAMPLE INFORMATION

METHODS FOR ANALYSIS

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type Matrix	Comments	LAB USE		
		Date	Time	Sampler						
1 RIT-B53-091713	1	9/17/13	1535	HY	N	G	S	X		
2 RIT-SW7-091713	1	9/17/13	1610	HY	N	G	S	X		
3 RLT-SW8-091713	1	9/17/13	1615	HY	N	G	S	X		
4 RLT-SW9-091713	1	9/17/13	1620	HY	N	G	S	X		
5 RLT-SW10-091713	1	9/17/13	1625	HY	N	G	S	X		
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										



580-40352 Chain of Custody

Requisitioned By: *[Signature]* Date/Time: 9/18/13 11:05 Received By: *[Signature]* Date/Time: 9/18/13 11:07

Requisitioned By: *[Signature]* Date/Time: 9/18/13 16:00 Received By: *[Signature]* Date/Time: 9/19/13 9:30

Requisitioned By: *[Signature]* Date/Time: _____ Received By: _____ Date/Time: _____

Received by Laboratory: _____ Date/Time: _____ Lab Remarks: _____ Lab Custody Intact? Yes No

Comments and Special Analytical Requirements:
 Cooler/Disc/Disc IR cor 12 unc
 Cooler Disc *[Signature]* @ Lab
 Wet Packs Packing bubble
 w/ 60 Food grade PO

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

7AL-7001 (05/08)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40352-1

Login Number: 40352

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

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.	N/A	
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.	N/A	
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



East and West Debris

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40905-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
32001-32nd Ave South, Suite 100
Federal Way, Washington 98001

Attn: Terry Parks

Kristine D. Allen

Authorized for release by:
10/23/2013 5:22:53 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com



LINKS

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results through
TotalAccess

Have a Question?



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www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Job ID: 580-40905-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/19/2013 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

Except:

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GTP36B-NSW-101713 (580-40905-6). The container label lists sample ID of GTP36B-NSW-101713. The COC lists sample ID of GTP3B-NSW-101713.

The client was contacted and notified the lab via email on 10/21/2013 that the correct sample ID is GTP36B-NSW-101713. The sample ID was corrected to match the sample label.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 147742, for the following sample from preparation batch 147757: GTP36B-ESW-101713 (580-40905-7), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of weathered/degraded diesel fuel and motor oil. The affected analyte range(s) have been Y qualified and reported.

In analytical batch for the following sample from preparation batch 147757:GTP36B-SSW-101713 (580-40905-8), the result Motor Oil (>C24-C36) range is due to what most closely resembles a complex mixture of motor oil products. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-NSW-101713

Lab Sample ID: 580-40905-1

Date Collected: 10/17/13 14:10

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 89.4

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	10/22/13 12:20	10/22/13 18:53	1
Motor Oil (>C24-C36)	ND		54		mg/Kg	☼	10/22/13 12:20	10/22/13 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				10/22/13 12:20	10/22/13 18:53	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.3		0.48		mg/Kg	☼	10/21/13 10:36	10/21/13 16:10	10
Barium	130		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 16:10	10
Cadmium	ND		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 16:10	10
Chromium	17		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 16:10	10
Lead	15		0.19		mg/Kg	☼	10/21/13 10:36	10/21/13 16:10	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/21/13 11:54	1
Percent Moisture	11		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-ESW-101713

Lab Sample ID: 580-40905-2

Date Collected: 10/17/13 14:15

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 90.6

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	10/22/13 12:20	10/22/13 19:29	1
Motor Oil (>C24-C36)	ND		51		mg/Kg	☼	10/22/13 12:20	10/22/13 19:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				10/22/13 12:20	10/22/13 19:29	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.9		0.43		mg/Kg	☼	10/21/13 10:36	10/21/13 16:14	10
Barium	130		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:14	10
Cadmium	ND		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:14	10
Chromium	16		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:14	10
Lead	13		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:14	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/21/13 11:54	1
Percent Moisture	9.4		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-SSW-101713

Lab Sample ID: 580-40905-3

Date Collected: 10/17/13 14:20

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 90.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☼	10/22/13 12:20	10/22/13 19:46	1
Motor Oil (>C24-C36)	ND		51		mg/Kg	☼	10/22/13 12:20	10/22/13 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				10/22/13 12:20	10/22/13 19:46	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.6		0.49		mg/Kg	☼	10/21/13 10:36	10/21/13 16:18	10
Barium	120		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:18	10
Cadmium	ND		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:18	10
Chromium	13		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:18	10
Lead	10		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:18	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/21/13 11:54	1
Percent Moisture	9.3		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-WSW-101713

Lab Sample ID: 580-40905-4

Date Collected: 10/17/13 14:25

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 90.8

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	10/22/13 12:20	10/22/13 20:04	1
Motor Oil (>C24-C36)	ND		54		mg/Kg	☼	10/22/13 12:20	10/22/13 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				10/22/13 12:20	10/22/13 20:04	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.9		0.44		mg/Kg	☼	10/21/13 10:36	10/21/13 16:23	10
Barium	92		0.18		mg/Kg	☼	10/21/13 10:36	10/21/13 16:23	10
Cadmium	ND		0.18		mg/Kg	☼	10/21/13 10:36	10/21/13 16:23	10
Chromium	14		0.18		mg/Kg	☼	10/21/13 10:36	10/21/13 16:23	10
Lead	13		0.18		mg/Kg	☼	10/21/13 10:36	10/21/13 16:23	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			10/21/13 11:54	1
Percent Moisture	9.2		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-BS-101713

Lab Sample ID: 580-40905-5

Date Collected: 10/17/13 14:30

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 92.3

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	10/22/13 12:20	10/22/13 20:22	1
Motor Oil (>C24-C36)	ND		50		mg/Kg	☼	10/22/13 12:20	10/22/13 20:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				10/22/13 12:20	10/22/13 20:22	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.42		mg/Kg	☼	10/21/13 10:36	10/21/13 16:27	10
Barium	41		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:27	10
Cadmium	ND		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:27	10
Chromium	11		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:27	10
Lead	8.3		0.17		mg/Kg	☼	10/21/13 10:36	10/21/13 16:27	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/21/13 11:54	1
Percent Moisture	7.7		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36B-NSW-101713

Lab Sample ID: 580-40905-6

Date Collected: 10/17/13 14:40

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 92.5

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	10/22/13 12:20	10/22/13 20:40	1
Motor Oil (>C24-C36)	ND		53		mg/Kg	☼	10/22/13 12:20	10/22/13 20:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				10/22/13 12:20	10/22/13 20:40	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.0		0.50		mg/Kg	☼	10/21/13 10:36	10/21/13 16:31	10
Barium	76		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:31	10
Cadmium	ND		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:31	10
Chromium	13		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:31	10
Lead	10		0.20		mg/Kg	☼	10/21/13 10:36	10/21/13 16:31	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/21/13 11:54	1
Percent Moisture	7.5		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36B-ESW-101713

Lab Sample ID: 580-40905-7

Date Collected: 10/17/13 14:45

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 89.5

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	250	Y	25		mg/Kg	☼	10/22/13 12:20	10/22/13 21:33	1
Motor Oil (>C24-C36)	620	Y	51		mg/Kg	☼	10/22/13 12:20	10/22/13 21:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	103		50 - 150				10/22/13 12:20	10/22/13 21:33	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.34		mg/Kg	☼	10/21/13 10:36	10/21/13 16:35	10
Barium	110		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:35	10
Cadmium	0.78		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:35	10
Chromium	13		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:35	10
Lead	96		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:35	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			10/21/13 11:54	1
Percent Moisture	10		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36B-SSW-101713

Lab Sample ID: 580-40905-8

Date Collected: 10/17/13 14:50

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 88.9

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		27		mg/Kg	☼	10/22/13 12:20	10/22/13 21:50	1
Motor Oil (>C24-C36)	73	Y	54		mg/Kg	☼	10/22/13 12:20	10/22/13 21:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				10/22/13 12:20	10/22/13 21:50	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.9		0.38		mg/Kg	☼	10/21/13 10:36	10/21/13 16:40	10
Barium	90		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:40	10
Cadmium	0.22		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:40	10
Chromium	16		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:40	10
Lead	32		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:40	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			10/21/13 11:54	1
Percent Moisture	11		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36B-WSW-101713

Lab Sample ID: 580-40905-9

Date Collected: 10/17/13 14:55

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 92.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		26		mg/Kg	☼	10/22/13 12:20	10/22/13 22:08	1
Motor Oil (>C24-C36)	ND		52		mg/Kg	☼	10/22/13 12:20	10/22/13 22:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				10/22/13 12:20	10/22/13 22:08	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		0.35		mg/Kg	☼	10/21/13 10:36	10/21/13 16:44	10
Barium	67		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:44	10
Cadmium	ND		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:44	10
Chromium	11		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:44	10
Lead	8.5		0.14		mg/Kg	☼	10/21/13 10:36	10/21/13 16:44	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			10/21/13 11:54	1
Percent Moisture	7.3		0.10		%			10/21/13 11:54	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36B-BS-101713

Lab Sample ID: 580-40905-10

Date Collected: 10/17/13 15:00

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 91.9

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	10/22/13 12:20	10/22/13 22:26	1
Motor Oil (>C24-C36)	ND		50		mg/Kg	☼	10/22/13 12:20	10/22/13 22:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				10/22/13 12:20	10/22/13 22:26	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		0.36		mg/Kg	☼	10/21/13 10:36	10/21/13 16:48	10
Barium	53		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:48	10
Cadmium	ND		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:48	10
Chromium	13		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:48	10
Lead	6.8		0.15		mg/Kg	☼	10/21/13 10:36	10/21/13 16:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/21/13 11:54	1
Percent Moisture	8.1		0.10		%			10/21/13 11:54	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-147757/1-B

Matrix: Solid

Analysis Batch: 147742

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		10/22/13 12:20	10/22/13 18:00	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		10/22/13 12:20	10/22/13 18:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150	10/22/13 12:20	10/22/13 18:00	1

Lab Sample ID: LCS 580-147757/2-B

Matrix: Solid

Analysis Batch: 147742

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	500	508		mg/Kg		102	64 - 127
Motor Oil (>C24-C36)	500	571		mg/Kg		114	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	95		50 - 150

Lab Sample ID: LCSD 580-147757/3-B

Matrix: Solid

Analysis Batch: 147742

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 147757

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	500	532		mg/Kg		106	64 - 127	5	16
Motor Oil (>C24-C36)	500	602		mg/Kg		120	70 - 125	5	17

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	93		50 - 150

Lab Sample ID: 580-40905-1 DU

Matrix: Solid

Analysis Batch: 147742

Client Sample ID: GTP36-NSW-101713

Prep Type: Total/NA

Prep Batch: 147757

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	ND		ND		mg/Kg	☼	NC	35
Motor Oil (>C24-C36)	ND		ND		mg/Kg	☼	NC	35

Surrogate	DU %Recovery	DU Qualifier	Limits
<i>o</i> -Terphenyl	90		50 - 150

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-147654/23-A

Matrix: Solid

Analysis Batch: 147707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147654

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/21/13 10:36	10/21/13 15:23	10

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-147654/23-A

Matrix: Solid

Analysis Batch: 147707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147654

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Cadmium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Chromium	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10
Lead	ND		0.20		mg/Kg		10/21/13 10:36	10/21/13 15:23	10

Lab Sample ID: LCS 580-147654/24-A

Matrix: Solid

Analysis Batch: 147707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	197		mg/Kg		98	80 - 120
Barium	200	192		mg/Kg		96	80 - 120
Cadmium	5.00	4.83		mg/Kg		97	80 - 120
Chromium	20.0	19.2		mg/Kg		96	80 - 120
Lead	50.0	51.7		mg/Kg		103	80 - 120

Lab Sample ID: LCSD 580-147654/25-A

Matrix: Solid

Analysis Batch: 147707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 147654

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	197		mg/Kg		99	80 - 120	0	20
Barium	200	193		mg/Kg		96	80 - 120	0	20
Cadmium	5.00	4.73		mg/Kg		95	80 - 120	2	20
Chromium	20.0	19.5		mg/Kg		98	80 - 120	2	20
Lead	50.0	52.2		mg/Kg		104	80 - 120	1	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40905-1 DU

Matrix: Solid

Analysis Batch: 147661

Client Sample ID: GTP36-NSW-101713

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	89		89		%		0.2	20
Percent Moisture	11		11		%		2	20

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-NSW-101713

Lab Sample ID: 580-40905-1

Date Collected: 10/17/13 14:10

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 18:53	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:10	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36-ESW-101713

Lab Sample ID: 580-40905-2

Date Collected: 10/17/13 14:15

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 19:29	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:14	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36-SSW-101713

Lab Sample ID: 580-40905-3

Date Collected: 10/17/13 14:20

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 19:46	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:18	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36-WSW-101713

Lab Sample ID: 580-40905-4

Date Collected: 10/17/13 14:25

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 20:04	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:23	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36-BS-101713

Lab Sample ID: 580-40905-5

Date Collected: 10/17/13 14:30

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 20:22	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36B-NSW-101713

Lab Sample ID: 580-40905-6

Date Collected: 10/17/13 14:40

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 20:40	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:31	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36B-ESW-101713

Lab Sample ID: 580-40905-7

Date Collected: 10/17/13 14:45

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 21:33	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:35	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36B-SSW-101713

Lab Sample ID: 580-40905-8

Date Collected: 10/17/13 14:50

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 21:50	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:40	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Client Sample ID: GTP36B-WSW-101713

Lab Sample ID: 580-40905-9

Date Collected: 10/17/13 14:55

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 22:08	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:44	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Client Sample ID: GTP36B-BS-101713

Lab Sample ID: 580-40905-10

Date Collected: 10/17/13 15:00

Matrix: Solid

Date Received: 10/19/13 10:30

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			147757	10/22/13 12:20	WW1	TAL SEA
Total/NA	Cleanup	3630C			147778	10/22/13 15:47	WW1	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	147742	10/22/13 22:26	JJP	TAL SEA
Total/NA	Prep	3050B			147654	10/21/13 10:36	PAB	TAL SEA
Total/NA	Analysis	6020		10	147707	10/21/13 16:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	147661	10/21/13 11:54	WW1	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-40905-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40905-1	GTP36-NSW-101713	Solid	10/17/13 14:10	10/19/13 10:30
580-40905-2	GTP36-ESW-101713	Solid	10/17/13 14:15	10/19/13 10:30
580-40905-3	GTP36-SSW-101713	Solid	10/17/13 14:20	10/19/13 10:30
580-40905-4	GTP36-WSW-101713	Solid	10/17/13 14:25	10/19/13 10:30
580-40905-5	GTP36-BS-101713	Solid	10/17/13 14:30	10/19/13 10:30
580-40905-6	GTP36B-NSW-101713	Solid	10/17/13 14:40	10/19/13 10:30
580-40905-7	GTP36B-ESW-101713	Solid	10/17/13 14:45	10/19/13 10:30
580-40905-8	GTP36B-SSW-101713	Solid	10/17/13 14:50	10/19/13 10:30
580-40905-9	GTP36B-WSW-101713	Solid	10/17/13 14:55	10/19/13 10:30
580-40905-10	GTP36B-BS-101713	Solid	10/17/13 15:00	10/19/13 10:30



Chain of Custody Record

Tacoma, WA 98424
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA

OMSCA MTCA

40905

TestAmerica Laboratories, Inc

Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Date: 10/12/13

COC No. of COCs

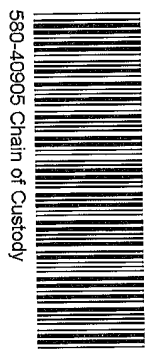
Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

Site Contact: Howard Young
Lab Contact: Kris Allen
Carrier: 101213

Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (e-Comp, g-Grav)	Matrix	# of Cont.
ETP36-NSW-101213	10/12/13	1410	g	S	1
ETP36-ESW-101213		1415		S	5
ETP36-SSW-101213		1420		S	5
ETP36-WSW-101213		1425		S	4
ETP36-B5-101213		1430		S	5
ETP36-NSW-101213		1440		S	6
ETP36B-ESW-101213		1445		S	7
ETP36B-SSW-101213		1450		S	8
ETP36B-WSW-101213		1455		S	9
ETP36B-B5-101213		1500		S	10

Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Heavy Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (4344/6020)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Other
X	X	X	X	X	X	NWTPH-DX W/SILVA KEL CLEAN-UP DIESEL OIL RANGE



580-40905 Chain of Custody

Cooler/TB Dig (R) cor 4.3 unc 4.6
Cooler Disc (R) rep. Lab
NetPacks Packing Bubble
Wires Paper out.

Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other
Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for 1 Months

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Custody Seal Intact: Yes No
Custody Seal No.:
Cooler Temp. (C): Obsd.:
Therm ID No.:

Reinforced by: [Signature]
Date/Time: 10/12/13 09:30
Received by: [Signature]
Date/Time: 10/18/13 16:00
Received in Laboratory by: [Signature]

Company: T.A. Spokane
Company: T.A. Spokane
Company: T.A. Spokane

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40905-1

Login Number: 40905

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

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.	N/A	
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?	N/A	Not requested on COC.
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
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.	N/A	
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

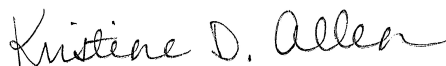
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-41021-1
Client Project/Site: Parkwater RA

For:
Kennedy/Jenks Consultants
10850 Gold Center Drive
Suite 350
Rancho Cordova, California 95670

Attn: Chris La Rose



Authorized for release by:
11/8/2013 4:21:06 PM

Kristine Allen, Project Manager I
(253)922-2310
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Job ID: 580-41021-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/25/2013 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Client Sample ID: GTP36-NSW-102313

Lab Sample ID: 580-41021-1

Date Collected: 10/23/13 15:50

Matrix: Solid

Date Received: 10/25/13 09:25

Percent Solids: 91.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.6		0.49		mg/Kg	☼	10/31/13 14:26	10/31/13 20:07	10
Barium	50		0.20		mg/Kg	☼	10/31/13 14:26	10/31/13 20:07	10
Cadmium	ND		0.20		mg/Kg	☼	10/31/13 14:26	10/31/13 20:07	10
Chromium	12		0.20		mg/Kg	☼	10/31/13 14:26	10/31/13 20:07	10
Lead	20		0.20		mg/Kg	☼	10/31/13 14:26	10/31/13 20:07	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			10/30/13 13:46	1
Percent Moisture	8.2		0.10		%			10/30/13 13:46	1

Client Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Client Sample ID: GTP36B-SSW-102313

Lab Sample ID: 580-41021-2

Date Collected: 10/23/13 16:00

Matrix: Solid

Date Received: 10/25/13 09:25

Percent Solids: 93.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.7		0.34		mg/Kg	☼	10/31/13 14:26	10/31/13 20:29	10
Barium	36		0.14		mg/Kg	☼	10/31/13 14:26	10/31/13 20:29	10
Cadmium	ND		0.14		mg/Kg	☼	10/31/13 14:26	10/31/13 20:29	10
Chromium	7.1		0.14		mg/Kg	☼	10/31/13 14:26	10/31/13 20:29	10
Lead	6.3		0.14		mg/Kg	☼	10/31/13 14:26	10/31/13 20:29	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			10/30/13 13:46	1
Percent Moisture	6.5		0.10		%			10/30/13 13:46	1



QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-148424/19-A
Matrix: Solid
Analysis Batch: 148441

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 148424

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		10/31/13 14:26	10/31/13 19:41	10
Barium	ND		0.20		mg/Kg		10/31/13 14:26	10/31/13 19:41	10
Cadmium	ND		0.20		mg/Kg		10/31/13 14:26	10/31/13 19:41	10
Chromium	ND		0.20		mg/Kg		10/31/13 14:26	10/31/13 19:41	10
Lead	ND		0.20		mg/Kg		10/31/13 14:26	10/31/13 19:41	10

Lab Sample ID: LCS 580-148424/20-A
Matrix: Solid
Analysis Batch: 148441

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 148424

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	189		mg/Kg		95	80 - 120
Barium	200	187		mg/Kg		94	80 - 120
Cadmium	5.00	4.55		mg/Kg		91	80 - 120
Chromium	20.0	18.3		mg/Kg		92	80 - 120
Lead	50.0	47.2		mg/Kg		94	80 - 120

Lab Sample ID: LCSD 580-148424/21-A
Matrix: Solid
Analysis Batch: 148441

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 148424

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	200	190		mg/Kg		95	80 - 120	0	20
Barium	200	191		mg/Kg		96	80 - 120	2	20
Cadmium	5.00	4.50		mg/Kg		90	80 - 120	1	20
Chromium	20.0	18.5		mg/Kg		92	80 - 120	1	20
Lead	50.0	48.0		mg/Kg		96	80 - 120	2	20

Lab Sample ID: 580-41021-1 MS
Matrix: Solid
Analysis Batch: 148441

Client Sample ID: GTP36-NSW-102313
Prep Type: Total/NA
Prep Batch: 148424

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	7.6		176	175		mg/Kg	✱	95	80 - 120
Barium	50		176	224		mg/Kg	✱	99	80 - 120
Cadmium	ND		4.39	3.97		mg/Kg	✱	88	80 - 120
Chromium	12		17.6	32.8		mg/Kg	✱	116	80 - 120
Lead	20		43.9	65.7		mg/Kg	✱	104	80 - 120

Lab Sample ID: 580-41021-1 MSD
Matrix: Solid
Analysis Batch: 148441

Client Sample ID: GTP36-NSW-102313
Prep Type: Total/NA
Prep Batch: 148424

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	7.6		175	185		mg/Kg	✱	101	80 - 120	6	20
Barium	50		175	245		mg/Kg	✱	112	80 - 120	9	20
Cadmium	ND		4.38	4.28		mg/Kg	✱	95	80 - 120	8	20
Chromium	12		17.5	32.9		mg/Kg	✱	117	80 - 120	0	20
Lead	20		43.8	69.7		mg/Kg	✱	114	80 - 120	6	20

TestAmerica Seattle

QC Sample Results

Client: Kennedy/Jenks Consultants
 Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-41021-1 DU
 Matrix: Solid
 Analysis Batch: 148441

Client Sample ID: GTP36-NSW-102313
 Prep Type: Total/NA
 Prep Batch: 148424

Analyte	Sample Result	Sample Qualifier	DU	DU	Unit	D	RPD	Limit
			Result	Qualifier				
Arsenic	7.6		6.86		mg/Kg	☼	10	20
Barium	50		44.6		mg/Kg	☼	11	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	12		11.3		mg/Kg	☼	10	20
Lead	20		17.7		mg/Kg	☼	11	20



Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Client Sample ID: GTP36-NSW-102313

Lab Sample ID: 580-41021-1

Date Collected: 10/23/13 15:50

Matrix: Solid

Date Received: 10/25/13 09:25

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148424	10/31/13 14:26	PAB	TAL SEA
Total/NA	Analysis	6020		10	148441	10/31/13 20:07	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	148314	10/30/13 13:46	JJP	TAL SEA

Client Sample ID: GTP36B-SSW-102313

Lab Sample ID: 580-41021-2

Date Collected: 10/23/13 16:00

Matrix: Solid

Date Received: 10/25/13 09:25

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			148424	10/31/13 14:26	PAB	TAL SEA
Total/NA	Analysis	6020		10	148441	10/31/13 20:29	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	148314	10/30/13 13:46	JJP	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater RA

TestAmerica Job ID: 580-41021-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-41021-1	GTP36-NSW-102313	Solid	10/23/13 15:50	10/25/13 09:25
580-41021-2	GTP36B-SSW-102313	Solid	10/23/13 16:00	10/25/13 09:25

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Chain of Custody Record

TestAmerica Laboratories, Inc.

Client Contact
Bruce Sheppard
BNSF Railway
2454 Occidental Avenue South, Suite 1A
Seattle, Washington 98134-1451
Project Name: Parkwater RA
Site: Parkwater, Spokane, WA
P O # BNSF Direct Bill Work Order No. TT0101-N10

41021

REG-CA MTA

Regulatory Program: DW NPDES RCRA MTA

Project Manager: Howard Young
Tel/Fax: 206-419-8629/ 253-952-3435

Site Contact: Howard Young
Lab Contact: Kris Allen

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below Order - 1
 2 weeks SD TAT
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Test Metals (As, Pb, Cd, Cr, Ba, Hg, Ag) (Y/N)	Semivolatile Organics (8270)	PCBs (8082)	Volatile Organic Compounds (8260)	Sample Specific Notes
6TP36-NSN-102313	10/24/13	1550	G	S	1			X				
6TP36B-SN-102313	↓	1600	↓	↓	1			X				

580-41021 Chain of Custody

Barcode: 580-41021 Chain of Custody

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client
 Disposal by Lab Archive for _____ Months

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other
 Possible Hazard Identification: Please List any EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Specific analysis list is on the attached Table 2 Backfill Testing Requirements. Analyze per methods and reporting limits listed on Table 2.

Custody Seal No.:
 Relinquished by: Chris Ladd Company: KLS
 Relinquished by: Stephanie Cut Stapleton Company: TestAmerica-So
 Relinquished by: _____ Company: _____

Carrier: _____ Date: 10/23/13 of _____ COCs
 Sampler: Chris Ladd
 For Lab Use Only:
 Walk-in Client
 Lab Sampling:
 Job / SDG No.:
 Cooler/TB DigIR cor. 5.8 und. 0
 Cooler Dsc Handwritten @ Lab
 Wet/Packs Packing Handwritten
 in Co. Tally P.O.

Received by: Stephanie Cut Stapleton Date/Time: 10/24/13 11:35
 Received by: Chris Ladd Date/Time: 10/25/13 9:25
 Received in Laboratory by: _____ Date/Time: _____



Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-41021-1

Login Number: 41021

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

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	No lot # labels on containers.
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.	N/A	
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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	