Appendix A

Backfill Specifications

Appendix A

Backfill Specifications

Proposed backfill material was sampled for Site contaminants of concern (COCs) to ensure excavations were filled with material below Site-specific cleanup levels (results are in Appendix B).

The bid specifications for fill:

- Pit Run Material: Provide unprocessed material from the pit similar in gradation to Standard Specifications Ballast per 9-03.9(1). Exceptions are possible based on the submittal showing gradation but the fraction passing the #200 sieve shall not exceed 9 percent and the fractions from No. 4 to No 200 account for approximately 50 percent of the gradation to assure obtaining high compaction values not less than 95 percent.

- Crushed Gravel/CSTC (Crushed Surfacing Top Course): Product shall be manufactured from ledge rock, talus, or gravel. The materials shall be uniform in quality and substantially free from wood, roots, bark, and other extraneous material. It shall have such characteristics of size and shape that it will compact and shall meet the requirements of the Standard Specifications at 9-03.9(3).

Gradational data provided by supplier were reviewed (attached) to determine whether the select fill and CSTC material met the requirements in the specifications for grain size distribution and fines content. The material submittals, including pit run/ballast, CSTC, and crushed surfacing base course, all met the specification requirements for gradation as shown in following Shop Drawing Review Letter and aggregate information.

For excavations, the subcontractor was required to backfill the excavation to a depth of 2 feet below the ground surface using clean Pit Run Material from the approved source (Perry Pit) and compact the material to 95% in 6-inch layers to allow installation of subballast and ballast for track replacement by BNSF. Subballast and ballast materials were placed from 2 feet below finish grade up to the finished grade.

For gravel capped areas, a geotextile membrane was placed and a 6-inch layer of CSTC material was placed and compacted to 95% of relative density.

Soil compaction reports have been included in Appendix E.

Response to Contractor Submittal No.: --

Kennedy/Jenks Consultants

Response Date:	11/18/2014	**K/J Job No.:**	1496110.06
Specification Section:	02302	**Project Name:**	Parkwater Rail Yard – Cleanup Action Plan 2014
Page:	1 of 1		

Item	K/J Action	Refer to Comment	Manufacturer or Supplier	Title of Submittal / Drawing
1	NET		Oldcastle Material – Sullivan Rd Pit	WSDOT 9-03.9(3) Crushed Surfacing Top Course
2	NET		Oldcastle Material – Sullivan Rd Pit	Pit Run [WSDOT 9-03.9(1) Ballast
3	NET		Oldcastle Material – Sullivan Rd Pit	WSDOT 9-03.9(3) Crushed Surfacing Base Course

A. The action(s) noted above have been taken on the enclosed document(s).

NET = No Exceptions Taken A&R = Amend and Resubmit NR = Not Reviewed
MCN = Make Corrections Noted RR = Rejected, Resubmit

Comment(s):

B. Corrections or comments made on the shop drawings during this review do not relieve the Contractor from compliance with the requirements of the Drawings and Specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. The Contractor is responsible for: confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating its work with that of all other trades, and performing its work in a safe and satisfactory manner.

Keith S. Parker, PE

Distribution	Submittal	Encl.	RESPONSE
Owner			
Engineer			
Contractor			
File			

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2350-5/8" Top Course
Specification 9-03.9.3 Crushed Surfacing TC

Sample Id	Date	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
1981312442	06/24/2014 07:40	100	99	94	87	70	59	36	16	10	6.9	0.0	
1981312816	06/24/2014 10:25	100	99	93	85	66	55	32	14	9	8.6	0.0	77
1634328611	06/25/2014 06:45	100	100	95	88	69	57	33	15	10	7.1	0.0	
1634328913	06/25/2014 09:10	100	99	94	88	51	51	36	16	11	7.5	0.0	
1634330141	06/26/2014 08:15	100	99	95	90	68	56	32	13	9	6.3	0.0	
1733301010	06/26/2014 10:20	100	98	94	88	70	58	34	15	10	6.9	0.0	
1733301661	06/27/2014 07:00	100	100	95	89	70	58	34	15	10	6.8	0.0	
1733301956	06/27/2014 09:15	100	100	95	88	71	58	35	15	10	6.9	0.0	
1981313880	06/30/2014 07:00	100	100	95	88	67	55	32	14	9	6.7	0.0	79
1989736957	06/30/2014 10:40	100	99	94	87	63	50	28	12	9	6.2	0.0	
1989737902	07/01/2014 07:45	100	100	96	89	69	57	34	14	10	6.5	0.0	
1989738400	07/01/2014 10:40	100	99	94	87	67	54	31	13	9	6.5	0.0	
1744252206	07/02/2014 07:20	100	100	96	89	69	56	33	14	10	6.7	0.0	
1744252771	07/02/2014 10:25	100	99	96	90	71	60	35	15	11	7.3	0.0	
1744253514	07/03/2014 06:55	100	100	96	92	73	60	35	15	11	7.5	0.0	
1744253686	07/03/2014 09:20	100	100	95	89	68	57	34	15	11	7.5	0.0	
1866359607	07/07/2014 07:00	100	99	94	87	68	55	32	14	9	6.4	0.0	
1866360075	07/07/2014 09:45	100	100	95	88	67	56	33	15	10	7.4	0.0	75
1874500248	08/12/2014 07:20	100	100	94	86	78	**70**	46	20	14	10.0	0.0	
1874500554	08/12/2014 09:40	100	100	92	85	76	**68**	43	18	12	8.1	0.0	
1874501489	08/13/2014 06:55	100	99	92	87	80	**73**	48	20	13	9.2	0.0	76
1980442031	08/13/2014 09:55	100	100	94	85	76	**67**	44	20	13	8.8	0.0	
1505386007	08/14/2014 06:35	100	99	90	82	71	61	36	15	10	7.0	0.0	
1505386369	08/14/2014 09:45	100	99	87	78	65	54	31	13	9	5.9	0.0	
1505387277	08/15/2014 06:35	100	99	92	83	72	62	40	17	12	7.8	0.0	

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2350-5/8" Top Course
Specification 9-03.9.3 Crushed Surfacing TC

Sample Id	Date	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
1505387553	08/15/2014 08:40	100	100	90	81	69	57	33	14	10	6.5	0.0	
1596670427	08/18/2014 07:15	100	99	92	84	74	64	40	17	11	7.7	0.0	79
1841343126	08/18/2014 09:55	100	100	90	83	73	64	40	18	12	8.3	0.0	
1841344387	08/19/2014 07:50	100	99	91	81	70	60	36	15	10	7.1	0.0	
1973569045	08/20/2014 06:45	100	100	90	83	74	64	41	18	12	7.6	0.0	
1973569468	08/20/2014 09:30	100	100	94	85	74	62	36	16	11	7.3	0.0	
1633998677	08/22/2014 06:40	100	100	91	84	75	66	42	19	13	9.7	0.0	
1761740880	08/22/2014 09:20	100	99	90	82	72	61	36	15	11	7.8	0.0	
1761740955	08/22/2014 11:25	100	99	90	80	69	60	36	15	10	7.0	0.0	
1761742301	08/25/2014 06:35	100	99	94	86	76	**69**	47	21	14	9.2	0.0	
1761742788	08/25/2014 09:30	100	99	92	84	75	**67**	44	20	13	8.9	0.0	
1898932882	08/26/2014 07:30	100	100	92	83	74	66	43	20	13	9.0	0.0	
1898933166	08/26/2014 10:10	100	100	92	84	74	65	42	19	13	9.0	0.0	
1813200730	09/18/2014 06:45	100	100	100	96	74	61	37	16	11	7.2	0.0	79
1888601058	09/18/2014 09:35	100	100	100	95	69	58	33	15	10	7.2	0.0	
1888601929	09/19/2014 06:45	100	100	95	87	66	55	32	14	10	6.7	0.0	
1888602177	09/19/2014 09:20	100	100	92	84	65	54	32	14	10	6.6	0.0	
1820314973	09/23/2014 07:55	100	100	93	83	66	55	33	15	10	7.0	0.0	
1820315355	09/23/2014 10:05	100	100	94	86	66	55	33	15	10	7.0	0.0	
1902346766	09/25/2014 06:30	100	98	89	76	54	**43**	24	10	7	4.7	0.0	
1902346887	09/25/2014 08:45	100	100	94	86	64	52	30	13	9	6.3	0.0	
1902347289	09/25/2014 10:55	100	99	94	84	63	52	30	14	9	6.6	0.0	
1959612217	09/26/2014 07:00	100	100	94	86	63	51	30	13	9	5.8	0.0	
1959612331	09/26/2014 09:05	100	100	95	83	62	51	30	13	9	6.7	0.0	
1703391301	09/29/2014 07:55	100	100	93	84	63	53	32	14	10	7.1	0.0	

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2350-5/8" Top Course
Specification 9-03.9.3 Crushed Surfacing TC

Sample Id	Date	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
1703391673	09/29/2014 09:30	100	100	95	84	62	51	30	14	10	6.8	0.0	
1703392439	09/30/2014 07:45	100	100	92	80	59	48	27	12	9	6.0	0.0	
1765489694	09/30/2014 09:45	100	100	91	79	57	47	27		8	5.9	0.0	78
1765490846	10/01/2014 10:35	100	99	95	87	66	55	32	14	9	6.5	0.0	75
1810508448	10/02/2014 07:25	100	100	95	87	66	55	33	15	10	6.9	0.0	
1810508603	10/02/2014 09:35	100	99	94	86	64	52	31	14	10	6.7	0.0	
1810509610	10/03/2014 07:50	100	99	89	78	57	45	25	11	8	5.1	0.0	
1810509646	10/03/2014 08:45	100	100	92	85	61	49	28	13	9	5.8	0.0	
1516669221	10/06/2014 06:55	100	100	94	85	61	50	28	12	8	5.5	0.0	
1516670536	10/07/2014 07:20	100	100	95	86	65	54	33	15	10	7.0	0.0	
1516670701	10/07/2014 09:00	100	100	94	84	62	51	31	14		6.9	0.0	

	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
Count	61	61	61	61	61	61	61	60	60	61	61	8
Mean	100	100	93	85	68	57	34	15	10	7.1	0.0	77
St Dev	0.0	0.5	2.4	3.6	5.9	6.4	5.4	2.3	1.6	1.07	0.00	1.8
Lower Target												
Upper Target												
Target	100		95			56		16		7		
Lower Spec (LSL)	99		80			46		8		0		
Upper Spec (USL)	100		100			66		24		10		

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2359-2 1/2" - 0 Crushed Ballast
Specification 2 1/2" -0 Ballast

Sample Id	Date	2 1/2" (63mm) (%)	2" (50mm) (%)	1 1/2" (37.5mm) (%)	1 1/4" (31.5mm) (%)	1" (25mm) (%)	3/4" (19mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)
1561932643	05/21/2014 12:30	100.0	100.0	100.0	100.0	**92.2**	75.2	55.7	47.4	37.3	32.3	21.0	9.9	6.6	4.26
1561932636	05/22/2014 12:47	100.0	100.0	100.0	93.8	77.6	58.2	43.2	36.7	29.0	**24.9**	16.5	8.1	5.6	3.77
1561932662	05/23/2014 12:05	100.0	100.0	98.7	94.2	**86.1**	68.3	46.8	39.6	31.2	27.0	17.5	8.4	5.6	3.59
1561932679	05/23/2014 12:57	100.0	100.0	96.1	90.9	73.7	59.3	40.6	34.2	26.4	**22.8**	14.2	6.6	4.3	2.82

	2 1/2" (63mm) (%)	2" (50mm) (%)	1 1/2" (37.5mm) (%)	1 1/4" (31.5mm) (%)	1" (25mm) (%)	3/4" (19mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)
Count	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mean	100.0	100.0	98.7	94.7	82.4	65.3	46.6	39.5	31.0	26.7	17.3	8.2	5.5	3.61
St Dev	0.00	0.00	1.83	3.80	8.36	8.05	6.60	5.72	4.66	4.09	2.82	1.35	0.91	0.596
Lower Target														
Upper Target														
Target	100	99			80					35		10		6
Lower Spec (LSL)	100	65			50					26				0
Upper Spec (USL)	100	100			85					44		16		9

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2359-2 1/2" - 0 Crushed Ballast
Specification 2 1/2" -0 Ballast

Sample Id	Date	Pan (%)
1561932643	05/21/2014 12:30	0.00
1561932636	05/22/2014 12:47	0.00
1561932662	05/23/2014 12:05	0.00
1561932679	05/23/2014 12:57	0.00

	Pan (%)
Count	4
Mean	0.00
St Dev	0.000
Lower Target	
Upper Target	
Target	
Lower Spec (LSL)	
Upper Spec (USL)	

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2379-1 1/4" Minus Crushed (Base Crs)
Specification 9-03.9.3 Crushed Surfacing BC

Sample Id	Date	1 1/4" (31.5mm) (%)	1" (25mm) (%)	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
1575778579	05/01/2014 10:55	100	97	82	72	59	45	32	27	16	8	5	2.9	0.0	
1575778857	05/01/2014 11:00	100	95	81	71	58	46	34	28	16	8	6	3.8	0.0	
1575778817	05/01/2014 12:20	100	99	90	**83**	73	59	42	35	21	10	7	4.7	0.0	
1575779324	05/02/2014 06:55	100	97	90	**83**	73	62	45	40	11	8	5	4.4		
1575779518	05/02/2014 08:35	100	98	85	78	71	58	42	35	22	10	7	5.0	0.0	69
1581420483	05/05/2014 06:50	100	98	90	80	67	54	40	34	21	10	7	4.5	0.0	
1581420965	05/05/2014 10:40	100	100	83	74	57	43	31	26	16	8	5	3.7	0.0	
1581421733	05/06/2014 07:10	100	98	87	76	63	48	35	30	18	9	7	5.1	0.0	
1769318204	05/06/2014 10:30	100	99	85	75	61	47	34	28	17	8	6	4.1	0.0	
1769318896	05/07/2014 06:45	100	100	90	80	69	55	41	35	22	10	7	5.2	0.0	74
1769319269	05/07/2014 10:05	100	97	85	75	60	46	33	27	16	8	5	3.6	0.0	
1737518929	05/08/2014 06:40	100	99	86	76	60	46	33	28	17	9	6	4.1	0.0	
1737519223	05/08/2014 09:00	100	97	87	78	64	49	35	29	18	8	6	3.9	0.0	
1737519498	05/08/2014 10:15	100	100	93	**89**	77	65	51	43	27	12	9	7.0	0.0	
1737520189	05/09/2014 06:40	100	97	82	70	53	42	32	27	16	8	5	3.8	0.0	70
1737520420	05/09/2014 09:15	100	98	86	73	60	48	35	29	18	9	7	4.6	0.0	
1930131467	05/12/2014 06:50	100	98	82	71	59	46	34	29	18	9	6	4.5	0.0	
1937934956	05/13/2014 07:30	100	99	83	72	60	45	32	27	16	8	6	4.3	0.0	
1967301968	05/14/2014 07:10	100	98	86	72	55	43	32	26	16	8	6	3.9	0.0	74
1967302214	05/14/2014 09:10	100	99	85	70	55	44	33	28	17	8	6	3.9	0.0	
1639604108	05/15/2014 06:50	100	99	83	70	55	43	32	27	16	8	6	3.8	0.0	
1639604479	05/15/2014 09:20	100	99	86	72	57	44	31	26	16	8	6	4.3	0.0	
1639605533	05/16/2014 07:15	100	98	89	79	63	49	35	29	18	9	7	4.8	0.0	
1876399446	05/16/2014 10:50	100	99	81	72	55	43	32	27	17	8	6	4.1	0.0	
1876400805	05/19/2014 07:30	100	99	81	67	53	40	30	25	15	7	5	3.5	0.0	

Statistical Analysis Report

Period 05/01/2014 - 10/29/2014
Plant 12001136-Sullivan Road
Product 2379-1 1/4" Minus Crushed (Base Crs)
Specification 9-03.9.3 Crushed Surfacing BC

Sample Id	Date	1 1/4" (31.5mm) (%)	1" (25mm) (%)	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
1940285939	05/19/2014 11:00	100	99	86	74	60	47	34	29	17	8	6	3.8	0.0	
1940286716	05/20/2014 07:55	100	98	86	75	59	47	35	30	18	9	6	4.2	0.0	
1940287144	05/20/2014 09:45	100	99	87	74	60	47	35	29	18	9	6	4.1	0.0	

	1 1/4" (31.5mm) (%)	1" (25mm) (%)	3/4" (19mm) (%)	5/8" (16mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#10 (2mm) (%)	#40 (0.425mm) (%)	#80 (0.18mm) (%)	#200 (75um) (%)	Pan (%)	SE (%)
Count	28	28	28	28	28	28	28	28	28	28	28	28	27	4
Mean	100	98	86	75	61	48	35	30	18	9	6	4.3	0.0	72
St Dev	0.0	1.0	3.1	4.8	6.3	6.2	4.9	4.4	2.8	1.1	0.8	0.73	0.00	2.6
Lower Target														
Upper Target														
Target														
Lower Spec (LSL)	100	80		50				25		3		0		
Upper Spec (USL)	100	100		80				45		18		7.5		

Washington State Department of Transportation
Lynn Peterson
Secretary of Transportation

Environmental and Engineering
State Materials Laboratory
P.O. Box 47365
Olympia, WA 98504-7365

360-709-5400 / Fax: 360-709-5585
TTY: 1-800-833-6388
www.wsdot.wa.gov

March 13, 2013

Clay Allen
Central Pre-Mix Concrete Company
7100 E. Broadway
Spokane, WA 99212
(509) 536-3412

Re: Preliminary Source Evaluation, ASA2013004

Dear Mr. Allen:

This letter is to inform you that preliminary testing for Mineral Aggregate applications has been completed on the sample taken from the site designated as PS-C-173 in Spokane County, Washington. The sample tested passed the requirements for the Mineral Aggregate applications as indicated in Section 9-03 of the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction (2012).

The enclosed Aggregate Source Approval (ASA) Report lists specific approved uses for the aggregate from this site. The Aggregate Source Approval database is available on the Internet at: http://www.wsdot.wa.gov/biz/mats/asa/asaSearch.cfm

The reports and all backup data will remain on file at the WSDOT Materials Laboratory. If there are any questions concerning this matter, please contact Bill Heryford at (360) 709-5449.

Sincerely,

Rob Molohon
State Materials Documentation Engineer

RM: blh
Enclosure

cc via e-mail: K. Williams – Construction Materials Engineer
B. Briggs – Assistant Construction Materials Engineer – Admin
M. Polodna – Structural Materials Engineer
K. Littleton – Eastern Region Materials Engineer
C. Allen – Central Pre-Mix Concrete Company
(callen@oldcastlematerial.com)

Washington State Department of Transportation

WSDOT MATERIALS LAB

03/13/2013

Aggregate Source Approval Report

Owner: Central Pre-Mix Concrete Co.
Lessee:
Located in: SW 1/4 Section 12 T25N R44E

Aggregate Source: PS-C-173
Known as: Sullivan Rd.
County: Spokane

Remarks:

Pit Run Materials:
At the discretion of the Project Engineer, preliminary samples for Gradation and Sand Equivalent tests may be performed to determine if the material does in fact meet the specification for the intended use:

Backfill for Rock Wall	Backfill for Sand Drains	Bedding Material for Rigid Pipe
Bedding Material for Thermoplastic Pipe	Blending Sand	Foundation Material for Classes A, B or C
Gravel Backfill for Drains and Drywells	Gravel Backfill for Foundation Class B	Gravel Backfill for Pipe Zone Bedding
Gravel Backfill for Walls	Gravel Borrow	Sand Drainage Blanket
Select or Common Borrow		

No Preliminary Tests are required to be performed by the State Materials Lab

Gravel Base: Test Date: 05/01/1981 Expiration Date: 05/01/1991

Drainage: R Value: 75 Swell Pressure: 0

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of GRAVEL BASE is required prior to use.

Mineral Agg. and Surfacing: Test Date: 03/12/2013 Expiration Date: 03/12/2018

Absorption:	Apparent Sp. G.:	Bulk Sp. G. (SSD): 2.68	Bulk Sp. G.:
Deg: 69	LA: 20		

Currently approved as a source of aggregate for:

ATB	Ballast	BST Crushed Cover Stone
BST Crushed Screenings	Crushed Surfacing Base Course	Crushed Surfacing Key Stone
Crushed Surfacing Top Course	Gravel Backfill for Foundation Class A	HMA Other Courses
HMA Wearing Course	Maintenance Rock	Permeable Ballast

Acceptance tests need to be performed as necessary.

Portland Cement Concrete Aggregates: Test Date: 11/03/2010 Expiration Date: 11/03/2015

ASR - 14 Day : 0.38	ASR - One Year: 0.04	CCA Absorption: 1	CCA Sp.G: 2.656
FCA Absorption: 2	FCA Organics: 1	FCA Sp. G: 2.611	LA: 15
Mortar Strength:	Petrographic Analysis:		

Currently approved for:
Coarse Concrete Aggregates
Fine Concrete Aggregates

Acceptance tests need to be performed as necessary

Riprap and Quarry Spalls: Test Date: Expiration Date:

Please see Remarks for Riprap and Quarry Spalls results.

Contact the Regional Materials Office to request PRELIMINARY SAMPLES be acquired. Evaluation and approval of this site as a source of RIP RAP AND QUARRY SPALLS is required prior to use.

Distribution: Physical Testing_____ Project Engineer_____ Region Operations_____ Region Materials_____

Aggregate Source Approval System

Appendix B

Documentation of Imported Clean Backfill

B-1: Analytical Table

APPENDIX B
TABLE B-1

IMPORTED BACKFILL ANALYTICAL RESULTS
COMPARED TO SITE-SPECIFIC CLEANUP LEVELS
BNSF Parkwater Rail Yard, Spokane, Washington

Constituent	PERRY-1-5[a]	Perry-1[b]	AIRWAY-1-5[a]	CPMPR111914	Site-Specific Cleanup Level
Date	8/13/2013	8/13/2013	8/13/2013	11/19/2014	
Total Petroleum Hydrocarbons (NWTPH-HCID)[c](mg/kg)					
Motor Oil	100[d] U	NA	98 U	52 U	2,000[e]
#2 Diesel (>C12-C24)	51 U	NA	49 U	26 U	2,000[e]
Gasoline	21 U	NA	20 U	5.6 U	30[e]
Metals[f] (mg/kg)					
Arsenic	**7.2**	NA	**9.4**	**5.7**	9[g]
Barium	**73**	NA	**55**	**98**	1,648[g]
Cadmium	0.87 U	NA	0.75 U	0.18 U	1[g]
Chromium	**1.6**	NA	**8.6**	**12**	18[g]
Lead	**3.3**	NA	**7.9**	**5.8**	1,000[g]
Selenium	4.3L[h] U	NA	3.8 U	0.64 U	400[i]
Silver	**1.3**	NA	1.1 U	0.18 U	400[i]
Mercury	0.012 U	NA	0.015 U	0.017 U	0.02[j]
Polycyclic Aromatic Hydrocarbons (µg/kg)					
Naphthalene	4.9 U	NA	NA	NA	5,000[e]
2-Methylnaphthalene	4.9 U	NA	NA	NA	32000[k]
1-Methylnaphthalene	4.9 U	NA	NA	NA	34500[l]
Acenaphthylene	4.9 U	NA	NA	NA	NE
Acenaphthene	4.9 U	NA	NA	NA	4800000[k]
Fluorene	4.9 U	NA	NA	NA	3200000[k]
Phenanthrene	4.9 U	NA	NA	NA	NE
Anthracene	4.9 U	NA	NA	NA	2400000[k]
Fluoranthene	4.9 U	NA	NA	NA	3200000[k]
Pyrene	4.9 U	NA	NA	NA	2400000[k]
Benzo(a)anthracene	4.9 U	NA	NA	NA	1400[l]
Chrysene	4.9 U	NA	NA	NA	140000[l]
Benzo(b)fluoranthene	4.9 U	NA	NA	NA	1400[l]
Benzo(k)fluoranthene	4.9 U	NA	NA	NA	14000[l]
Benzo(a)pyrene	4.9 U	NA	NA	NA	140[l]
Indeno(1,2,3-cd)pyrene	4.9 U	NA	NA	NA	1400[l]
Dibenzo(a,h)anthracene	4.9 U	NA	NA	NA	140[l]
Benzo(g,h,i)perylene	4.9 U	NA	NA	NA	NE
Volatile Organic Compounds (µg/kg)					
Acetone	NA	790 U	NA	NA	72000000[i]
Benzene	NA	31 U	NA	NA	30[e]
Ethylbenzene	NA	79 U	NA	NA	6,000[e]
Methylene Chloride	NA	31 U	NA	NA	20[m]
m-Xylene and p-Xylene	NA	79 U	NA	NA	9,000[e]
o-Xylene	NA	79 U	NA	NA	9,000[e]
Tetrachloroethene	NA	39 U	NA	NA	50[e]
Toluene	NA	79 U	NA	NA	7,000[e]
Trichloroethene	NA	31 U	NA	NA	30[e]
Trichlorofluoromethane	NA	79 U	NA	NA	24000000[i]

Notes:

Site-Specific Cleanup Levels are from Table 2 Backfill Testing Requirements in the GeoEngineers Engineering Design Report dated March 6, 2013.

(a) Samples PERRY-1-5 and AIRWAY-1-5 are 5-point composite samples collected from the select fill stockpiles.

(b) Sample PERRY-1 is a discrete grab sample from the Perry-1-5 composite sample that was preserved in the field for analysis of volatile organic compounds.

(c) Samples analyzed for the potential presence and type of petroleum hydrocarbons using Washington State Department of Ecology (Ecology) Method NWTPH-HCID, "Hydrocarbon Identification Method for Soil and Water".

(d) "U" indicates analyte was analyzed for, but not detected at the indicated reporting limit.

(e) Model Toxics Control Act (MTCA) Method A Unrestricted Land Use, Table Value.

(f) Samples analyzed for metals using U.S. Environmental Protection Agency Method 6010B.

(g) Derived from Final Cleanup Action Plan Tables 4 and 5 (Washington State Department of Ecology, November 2011).

(h) A negative instrument reading had an absolute value greater than the reporting limit.

(i) MTCA Method B Unrestricted Land Use, Table Value.

(j) 90th Percentile for natural background soil metals concentrations for the Spokane Basin, Ecology Publication #94-115, dated October 1994.

(k) Based on MTCA Method B Standard Formula Value, Non-Carcinogen, Direct Contact (ingestion), Unrestricted Land Use.

(l) Based on MTCA Method B Standard Formula Value, Carcinogen, Direct Contact (ingestion), Unrestricted Land Use.

(m) MTCA Method A Industrial Land Use, Table Value.

Detected values are shown in bold

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

B-2: Laboratory Analytical Reports

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: 580-39795-1
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:
8/20/2013 5:46:13 PM

Kristine Allen, Project Manager I
kristine.allen@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.

Table of Contents

Case Narrative

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

TestAmerica Job ID: 580-39795-1

Job ID: 580-39795-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 8/15/2013 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.7º C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

GC Semi VOA
No analytical or quality issues were noted.

Metals - Method(s) 6010B
The absolute value of Se was above the RL. ICP spectra has been examined and Se can be reported as ND.

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.

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

TestAmerica Job ID: 580-39795-1

Qualifiers

Metals

Qualifier	Qualifier Description
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

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

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

TestAmerica Job ID: 580-39795-1

Client Sample ID: Perry-1-5
Date Collected: 08/13/13 00:00
Date Received: 08/15/13 09:45

Lab Sample ID: 580-39795-6
Matrix: Solid
Percent Solids: 93.8

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		100		mg/Kg	☼	08/19/13 10:32	08/19/13 18:47	1
Gasoline	ND		21		mg/Kg	☼	08/19/13 10:32	08/19/13 18:47	1
#2 Diesel (>C12-C24)	ND		51		mg/Kg	☼	08/19/13 10:32	08/19/13 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*08/19/13 10:32*	*08/19/13 18:47*	*1*
4-Bromofluorobenzene (Surr)	*63*		*50 - 150*	*08/19/13 10:32*	*08/19/13 18:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.2**		2.6		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1
Barium	**73**		0.43		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1
Cadmium	ND		0.87		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1
Chromium	**1.6**		1.1		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1
Lead	**3.3**		1.3		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1
Selenium	ND	L	4.3		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1
Silver	**1.3**		1.3		mg/Kg	☼	08/15/13 16:05	08/16/13 19:56	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.012		mg/Kg	☼	08/20/13 11:00	08/20/13 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**94**		0.10		%			08/15/13 14:46	1
Percent Moisture	**6.2**		0.10		%			08/15/13 14:46	1

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

TestAmerica Job ID: 580-39795-1

Client Sample ID: Airway-1-5
Date Collected: 08/13/13 00:00
Date Received: 08/15/13 09:45

Lab Sample ID: 580-39795-12
Matrix: Solid
Percent Solids: 96.5

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		98		mg/Kg	☼	08/19/13 10:32	08/19/13 19:25	1
Gasoline	ND		20		mg/Kg	☼	08/19/13 10:32	08/19/13 19:25	1
#2 Diesel (>C12-C24)	ND		49		mg/Kg	☼	08/19/13 10:32	08/19/13 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*08/19/13 10:32*	*08/19/13 19:25*	*1*
4-Bromofluorobenzene (Surr)	*74*		*50 - 150*	*08/19/13 10:32*	*08/19/13 19:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.4**		2.3		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1
Barium	**55**		0.38		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1
Cadmium	ND		0.75		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1
Chromium	**8.6**		0.98		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1
Lead	**7.9**		1.1		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1
Selenium	ND		3.8		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1
Silver	ND		1.1		mg/Kg	☼	08/15/13 16:05	08/16/13 19:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.015		mg/Kg	☼	08/20/13 11:00	08/20/13 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**97**		0.10		%			08/15/13 14:46	1
Percent Moisture	**3.5**		0.10		%			08/15/13 14:46	1

Method: NWTPH-HCID - Northwest - Hydrocarbon Identification (GC)

Lab Sample ID: MB 580-142868/1-A
Matrix: Solid
Analysis Batch: 142914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 142868

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	ND		100		mg/Kg		08/19/13 10:32	08/19/13 17:50	1
Gasoline	ND		20		mg/Kg		08/19/13 10:32	08/19/13 17:50	1
#2 Diesel (>C12-C24)	ND		50		mg/Kg		08/19/13 10:32	08/19/13 17:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*50 - 150*	*08/19/13 10:32*	*08/19/13 17:50*	*1*
4-Bromofluorobenzene (Surr)	*58*		*50 - 150*	*08/19/13 10:32*	*08/19/13 17:50*	*1*

Lab Sample ID: 580-39795-6 DU
Matrix: Solid
Analysis Batch: 142914

Client Sample ID: Perry-1-5
Prep Type: Total/NA
Prep Batch: 142868

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Motor Oil	ND			ND		mg/Kg	☼			NC	35
Gasoline	ND			ND		mg/Kg	☼			NC	35
#2 Diesel (>C12-C24)	ND			ND		mg/Kg	☼			NC	35

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*85*		*50 - 150*
4-Bromofluorobenzene (Surr)	*78*		*50 - 150*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-142640/23-A
Matrix: Solid
Analysis Batch: 142958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 142640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		08/15/13 16:05	08/16/13 18:49	1
Barium	ND		0.50		mg/Kg		08/15/13 16:05	08/16/13 18:49	1
Cadmium	ND		1.0		mg/Kg		08/15/13 16:05	08/16/13 18:49	1
Chromium	ND		1.3		mg/Kg		08/15/13 16:05	08/16/13 18:49	1
Lead	ND		1.5		mg/Kg		08/15/13 16:05	08/16/13 18:49	1
Selenium	ND		5.0		mg/Kg		08/15/13 16:05	08/16/13 18:49	1
Silver	ND		1.5		mg/Kg		08/15/13 16:05	08/16/13 18:49	1

Lab Sample ID: LCS 580-142640/24-A
Matrix: Solid
Analysis Batch: 142958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142640

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			200	205		mg/Kg		103	80 - 120		
Barium			200	213		mg/Kg		107	80 - 120		
Cadmium			5.00	5.53		mg/Kg		111	80 - 120		
Chromium			20.0	21.8		mg/Kg		109	80 - 120		
Lead			50.0	51.1		mg/Kg		102	80 - 120		
Selenium			200	206		mg/Kg		103	80 - 120		

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

Lab Sample ID: LCS 580-142640/24-A
Matrix: Solid
Analysis Batch: 142958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	30.0	31.5		mg/Kg		105	75 - 120

Lab Sample ID: LCSD 580-142640/25-A
Matrix: Solid
Analysis Batch: 142958

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 142640

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	205		mg/Kg		102	80 - 120	0	20
Barium	200	214		mg/Kg		107	80 - 120	0	20
Cadmium	5.00	5.61		mg/Kg		112	80 - 120	1	20
Chromium	20.0	21.8		mg/Kg		109	80 - 120	0	20
Lead	50.0	51.7		mg/Kg		103	80 - 120	1	20
Selenium	200	205		mg/Kg		102	80 - 120	0	20
Silver	30.0	32.7		mg/Kg		109	75 - 120	4	20

Lab Sample ID: LCSSRM 580-142640/26-A
Matrix: Solid
Analysis Batch: 142958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142640

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	272		mg/Kg		107.8	73.8 - 126.2
Cadmium	191	213		mg/Kg		111.7	73.3 - 126.7
Chromium	128	136		mg/Kg		106.6	65.5 - 129.7
Lead	103	107		mg/Kg		104.1	70.9 - 128.2
Selenium	110	116		mg/Kg		105.5	66.0 - 134.5
Silver	47.3	51.5		mg/Kg		108.9	66.4 - 133.6

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-142885/21-A
Matrix: Solid
Analysis Batch: 143005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 142885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017		mg/Kg		08/20/13 11:00	08/20/13 12:04	1

Lab Sample ID: LCS 580-142885/22-A
Matrix: Solid
Analysis Batch: 143005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.181		mg/Kg		108	80 - 120

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 580-142885/23-A
Matrix: Solid
Analysis Batch: 143005

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 142885

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.167	0.177		mg/Kg		106	80 - 120	2	20

Lab Sample ID: LCSSRM 580-142885/24-A ^10
Matrix: Solid
Analysis Batch: 143005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142885

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			12.4	15.1		mg/Kg		122.0	51.3 - 148.4		

Lab Chronicle

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

TestAmerica Job ID: 580-39795-1

Client Sample ID: Perry-1-5

Lab Sample ID: 580-39795-6

Date Collected: 08/13/13 00:00
Matrix: Solid
Date Received: 08/15/13 09:45
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			142868	08/19/13 10:32	WW1	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	142914	08/19/13 18:47	JL1	TAL SEA
Total/NA	Prep	3050B			142640	08/15/13 16:05	PAB	TAL SEA
Total/NA	Analysis	6010B		1	142958	08/16/13 19:56	HJM	TAL SEA
Total/NA	Prep	7471A			142885	08/20/13 11:00	PAB	TAL SEA
Total/NA	Analysis	7471A		1	143005	08/20/13 13:05	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	142630	08/15/13 14:46	KJV	TAL SEA

Client Sample ID: Airway-1-5

Lab Sample ID: 580-39795-12

Date Collected: 08/13/13 00:00
Matrix: Solid
Date Received: 08/15/13 09:45
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			142868	08/19/13 10:32	WW1	TAL SEA
Total/NA	Analysis	NWTPH-HCID		1	142914	08/19/13 19:25	JL1	TAL SEA
Total/NA	Prep	3050B			142640	08/15/13 16:05	PAB	TAL SEA
Total/NA	Analysis	6010B		1	142958	08/16/13 19:59	HJM	TAL SEA
Total/NA	Prep	7471A			142885	08/20/13 11:00	PAB	TAL SEA
Total/NA	Analysis	7471A		1	143005	08/20/13 13:07	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	142630	08/15/13 14:46	KJV	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: BNSF Parkwater

TestAmerica Job ID: 580-39795-1

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: BNSF Parkwater

TestAmerica Job ID: 580-39795-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-39795-6	Perry-1-5	Solid	08/13/13 00:00	08/15/13 09:45
580-39795-12	Airway-1-5	Solid	08/13/13 00:00	08/15/13 09:45

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
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 #: 39795

CLIENT: BNSF

INVOICE TO: BNSF
BRUCE SHEPPERD

REPORT TO: HOWARD YOUNG
ADDRESS: KENNEDY/JENKS CONSULTANTS
32001 32ND AVE. SOUTH SUITE 100
FEDERAL WAY, WA 98001
PHONE: ~~425-435~~ ~~FAX~~ PH: 253-835-6431

P.O. NUMBER:

PROJECT NAME: PARKWATER RA

PROJECT NUMBER:

SAMPLED BY: HOWARD YOUNG

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 SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: COMPOSITE TO PERRY-1-5	REQUESTED ANALYSES: COMPOSITE TO AIRWAY-1-5	REQUESTED ANALYSES: RCRA 8 METALS	REQUESTED ANALYSES: TPH - HCID	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	*PERRY-1	8/13/13 12:50		X				S	3		-1
2	*PERRY-2	13:00		X				S	3		-2
3	*PERRY-3	13:15		X				S	3		-3
4	*PERRY-4	13:30		X				S	3		-4
5	*PERRY-5	13:40		X				S	3		-5 -6
6	**AIRWAY-1	15:35			X			S	3		-7
7	**AIRWAY-2	15:45			X			S	3		-8
8	**AIRWAY-3	15:50			X			S	3		-9
9	**AIRWAY-4	16:00			X			S	3		-10
10	**AIRWAY-5	16:10			X			S	3		-11 -12

580-39795 Chain of Custody

Cooler/TB Dig/IR cor 2.7 unc 2.5
Cooler Dsc Ice/Blue @ Lab
Wet/Packs Packing other
w/o Fedex P.O

RELEASED BY: Howard Young	DATE: 8/13/2013	RECEIVED BY: Cat Stapleton	DATE: 8-B-13
PRINT NAME: HOWARD YOUNG	FIRM: KENNEDY/JENKS	PRINT NAME: Cat Stapleton	FIRM: TestAmerica
	TIME: 17:15		TIME: 17:20
RELEASED BY: Cat Stapleton	DATE: 8/14/13	RECEIVED BY: Cathy Crandall	DATE: 8/15/13
PRINT NAME: Cat Stapleton	FIRM: TA-Spokane	PRINT NAME: Cathy Crandall	FIRM: TA Sea
	TIME: 16:00		TIME: 9:45

ADDITIONAL REMARKS: *COMPOSITE SAMPLES PERRY-1 THROUGH PERRY-5 INTO PERRY-1-5 ANALYZE COMPOSITE FOR RCRA 8 METALS AND TPH-HCID. HOLD REMAINDER OF SAMPLES.

TEMP: 5.6°C

PAGE OF

**COMPOSITE SAMPLES AIRWAY-1 THROUGH AIRWAY-5 INTO AIRWAY-1-15 AND ANALYZE COMPOSITE FOR RECRA 8 METALS AND TPH-HCID.

TAL-1000 (0612)

8/20/2013

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-39795-1

Login Number: 39795

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.	False	Received Trip Blank(s) not listed on 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

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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: 580-39795-2
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:
8/27/2013 6:31:38 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

Table of Contents

Case Narrative

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

TestAmerica Job ID: 580-39795-2

Job ID: 580-39795-2

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 8/15/2013 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C SIM
In analytical batch 143410, the matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 143291 were outside the lower control limits for Naphthalene, 1 & 2-Methylnaphthalene, Acenaphthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Fluorene, Phenanthrene and Pyrene. 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.

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

TestAmerica Job ID: 580-39795-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F	MS or MSD 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)
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: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-39795-2

Client Sample ID: Perry-1
Date Collected: 08/13/13 12:50
Date Received: 08/15/13 09:45

Lab Sample ID: 580-39795-1
Matrix: Solid
Percent Solids: 95.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		790		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Benzene	ND		31		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Ethylbenzene	ND		79		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Methylene Chloride	ND		31		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
m-Xylene & p-Xylene	ND		79		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
o-Xylene	ND		79		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Tetrachloroethene	ND		39		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Toluene	ND		79		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Trichloroethene	ND		31		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1
Trichlorofluoromethane	ND		79		ug/Kg	☼	08/23/13 13:27	08/23/13 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 120*	*08/23/13 13:27*	*08/23/13 20:36*	*1*
Ethylbenzene-d10	*102*		*70 - 120*	*08/23/13 13:27*	*08/23/13 20:36*	*1*
Fluorobenzene (Surr)	*102*		*80 - 120*	*08/23/13 13:27*	*08/23/13 20:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*	*08/23/13 13:27*	*08/23/13 20:36*	*1*
Trifluorotoluene (Surr)				*08/23/13 13:27*	*08/23/13 20:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**96**		0.10		%			08/22/13 13:31	1
Percent Moisture	**4.4**		0.10		%			08/22/13 13:31	1

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

TestAmerica Job ID: 580-39795-2

Client Sample ID: Perry-1-5
Date Collected: 08/13/13 00:00
Date Received: 08/15/13 09:45

Lab Sample ID: 580-39795-6
Matrix: Solid
Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
2-Methylnaphthalene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
1-Methylnaphthalene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Acenaphthylene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Acenaphthene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Fluorene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Phenanthrene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Anthracene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Fluoranthene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Pyrene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Benzo[a]anthracene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Chrysene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Benzo[b]fluoranthene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Benzo[k]fluoranthene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Benzo[a]pyrene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Indeno[1,2,3-cd]pyrene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Dibenz(a,h)anthracene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1
Benzo[g,h,i]perylene	ND		4.9		ug/Kg	☼	08/23/13 11:47	08/26/13 11:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*42 - 151*	*08/23/13 11:47*	*08/26/13 11:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-143323/1-A
Matrix: Solid
Analysis Batch: 143338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 143323

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		400		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Benzene	ND		16		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Ethylbenzene	ND		40		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Methylene Chloride	ND		16		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
m-Xylene & p-Xylene	ND		40		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
o-Xylene	ND		40		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Tetrachloroethene	ND		20		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Toluene	ND		40		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Trichloroethene	ND		16		ug/Kg		08/23/13 13:27	08/23/13 14:30	1
Trichlorofluoromethane	ND		40		ug/Kg		08/23/13 13:27	08/23/13 14:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 120*	*08/23/13 13:27*	*08/23/13 14:30*	*1*
Ethylbenzene-d10	*86*		*70 - 120*	*08/23/13 13:27*	*08/23/13 14:30*	*1*
Fluorobenzene (Surr)	*103*		*80 - 120*	*08/23/13 13:27*	*08/23/13 14:30*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*	*08/23/13 13:27*	*08/23/13 14:30*	*1*
Trifluorotoluene (Surr)	*89*		*65 - 140*	*08/23/13 13:27*	*08/23/13 14:30*	*1*

Lab Sample ID: LCS 580-143323/2-A
Matrix: Solid
Analysis Batch: 143338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 143323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	3200	2720		ug/Kg		85	20 - 160
Benzene	800	724		ug/Kg		90	70 - 128
Ethylbenzene	800	692		ug/Kg		87	78 - 126
Methylene Chloride	800	654		ug/Kg		82	57 - 146
m-Xylene & p-Xylene	800	672		ug/Kg		84	78 - 126
o-Xylene	800	717		ug/Kg		90	77 - 127
Tetrachloroethene	800	694		ug/Kg		87	56 - 150
Toluene	800	740		ug/Kg		93	75 - 126
Trichloroethene	800	737		ug/Kg		92	83 - 124
Trichlorofluoromethane	800	814		ug/Kg		102	47 - 165

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 120*
Ethylbenzene-d10	*98*		*70 - 120*
Fluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
Trifluorotoluene (Surr)	*82*		*65 - 140*

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

Lab Sample ID: MB 580-143291/1-A
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 143291

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
2-Methylnaphthalene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
1-Methylnaphthalene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Acenaphthylene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Acenaphthene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Fluorene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Phenanthrene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Anthracene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Fluoranthene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Pyrene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Benzo[a]anthracene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Chrysene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Benzo[a]pyrene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1
Benzo[g,h,i]perylene	ND		5.0		ug/Kg		08/23/13 09:30	08/26/13 10:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*42 - 151*	*08/23/13 09:30*	*08/26/13 10:08*	*1*

Lab Sample ID: LCS 580-143291/2-A
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 143291

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	1010	749		ug/Kg		74	64 - 129
2-Methylnaphthalene	1000	779		ug/Kg		78	65 - 125
1-Methylnaphthalene	1010	789		ug/Kg		79	48 - 148
Acenaphthylene	999	823		ug/Kg		82	69 - 129
Acenaphthene	1000	755		ug/Kg		76	65 - 130
Fluorene	1010	735		ug/Kg		73	68 - 128
Phenanthrene	1010	711		ug/Kg		71	65 - 125
Anthracene	999	794		ug/Kg		79	73 - 123
Fluoranthene	1000	787		ug/Kg		79	61 - 121
Pyrene	999	753		ug/Kg		75	54 - 134
Benzo[a]anthracene	1000	801		ug/Kg		80	64 - 124
Chrysene	964	770		ug/Kg		80	71 - 126
Benzo[b]fluoranthene	1000	937		ug/Kg		94	66 - 136
Benzo[k]fluoranthene	999	789		ug/Kg		79	63 - 143
Benzo[a]pyrene	1000	834		ug/Kg		83	68 - 128
Indeno[1,2,3-cd]pyrene	1010	900		ug/Kg		89	59 - 139
Dibenz(a,h)anthracene	1000	879		ug/Kg		88	57 - 142
Benzo[g,h,i]perylene	1000	780		ug/Kg		78	57 - 142

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

Lab Sample ID: LCS 580-143291/2-A
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 143291

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	*78*		*42 - 151*

Lab Sample ID: LCSD 580-143291/3-A
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 143291

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			1010	747		ug/Kg		74	64 - 129	0	26
2-Methylnaphthalene			1000	769		ug/Kg		77	65 - 125	1	27
1-Methylnaphthalene			1010	780		ug/Kg		78	48 - 148	1	30
Acenaphthylene			999	837		ug/Kg		84	69 - 129	2	28
Acenaphthene			1000	763		ug/Kg		76	65 - 130	1	27
Fluorene			1010	742		ug/Kg		74	68 - 128	1	31
Phenanthrene			1010	727		ug/Kg		72	65 - 125	2	28
Anthracene			999	821		ug/Kg		82	73 - 123	3	27
Fluoranthene			1000	774		ug/Kg		77	61 - 121	2	36
Pyrene			999	743		ug/Kg		74	54 - 134	1	31
Benzo[a]anthracene			1000	791		ug/Kg		79	64 - 124	1	27
Chrysene			964	764		ug/Kg		79	71 - 126	1	26
Benzo[b]fluoranthene			1000	942		ug/Kg		94	66 - 136	0	31
Benzo[k]fluoranthene			999	778		ug/Kg		78	63 - 143	1	31
Benzo[a]pyrene			1000	832		ug/Kg		83	68 - 128	0	30
Indeno[1,2,3-cd]pyrene			1010	896		ug/Kg		89	59 - 139	0	29
Dibenz(a,h)anthracene			1000	882		ug/Kg		88	57 - 142	0	30
Benzo[g,h,i]perylene			1000	781		ug/Kg		78	57 - 142	0	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	*79*		*42 - 151*

Lab Sample ID: 580-39795-6 MS
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Perry-1-5
Prep Type: Total/NA
Prep Batch: 143291

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	ND		1030	724	F	ug/Kg	☼	71	75 - 125
2-Methylnaphthalene	ND		1020	749	F	ug/Kg	☼	73	75 - 125
1-Methylnaphthalene	ND		1020	757	F	ug/Kg	☼	74	75 - 125
Acenaphthylene	ND		1020	792		ug/Kg	☼	78	75 - 125
Acenaphthene	ND		1020	717	F	ug/Kg	☼	70	75 - 125
Fluorene	ND		1030	686	F	ug/Kg	☼	67	75 - 125
Phenanthrene	ND		1030	711	F	ug/Kg	☼	69	75 - 125
Anthracene	ND		1020	792		ug/Kg	☼	78	75 - 125
Fluoranthene	ND		1020	780		ug/Kg	☼	76	70 - 125
Pyrene	ND		1020	741	F	ug/Kg	☼	73	75 - 125
Benzo[a]anthracene	ND		1020	795		ug/Kg	☼	78	75 - 125
Chrysene	ND		983	720	F	ug/Kg	☼	73	75 - 125
Benzo[b]fluoranthene	ND		1020	876		ug/Kg	☼	86	75 - 125
Benzo[k]fluoranthene	ND		1020	709	F	ug/Kg	☼	70	75 - 125

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

Lab Sample ID: 580-39795-6 MS
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Perry-1-5
Prep Type: Total/NA
Prep Batch: 143291

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	ND		1020	784		ug/Kg	☼	77	75 - 125
Indeno[1,2,3-cd]pyrene	ND		1030	864		ug/Kg	☼	84	75 - 125
Dibenz(a,h)anthracene	ND		1020	828		ug/Kg	☼	81	75 - 125
Benzo[g,h,i]perylene	ND		1020	742	F	ug/Kg	☼	73	75 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*74*		*42 - 151*

Lab Sample ID: 580-39795-6 MSD
Matrix: Solid
Analysis Batch: 143410

Client Sample ID: Perry-1-5
Prep Type: Total/NA
Prep Batch: 143291

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		1030	759	F	ug/Kg	☼	74	75 - 125	5	26
2-Methylnaphthalene	ND		1030	775		ug/Kg	☼	76	75 - 125	3	27
1-Methylnaphthalene	ND		1030	788		ug/Kg	☼	77	75 - 125	4	30
Acenaphthylene	ND		1020	850		ug/Kg	☼	83	75 - 125	7	28
Acenaphthene	ND		1020	771		ug/Kg	☼	75	75 - 125	7	27
Fluorene	ND		1030	785		ug/Kg	☼	76	75 - 125	13	31
Phenanthrene	ND		1030	740	F	ug/Kg	☼	72	75 - 125	4	28
Anthracene	ND		1020	835		ug/Kg	☼	82	75 - 125	5	27
Fluoranthene	ND		1020	814		ug/Kg	☼	79	70 - 125	4	36
Pyrene	ND		1020	778		ug/Kg	☼	76	75 - 125	5	31
Benzo[a]anthracene	ND		1030	833		ug/Kg	☼	81	75 - 125	5	27
Chrysene	ND		987	743		ug/Kg	☼	75	75 - 125	3	26
Benzo[b]fluoranthene	ND		1020	921		ug/Kg	☼	90	75 - 125	5	31
Benzo[k]fluoranthene	ND		1020	723	F	ug/Kg	☼	71	75 - 125	2	31
Benzo[a]pyrene	ND		1020	808		ug/Kg	☼	79	75 - 125	3	30
Indeno[1,2,3-cd]pyrene	ND		1030	875		ug/Kg	☼	85	75 - 125	1	29
Dibenz(a,h)anthracene	ND		1020	847		ug/Kg	☼	83	75 - 125	2	30
Benzo[g,h,i]perylene	ND		1020	759	F	ug/Kg	☼	74	75 - 125	2	28

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*76*		*42 - 151*

Lab Chronicle

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

TestAmerica Job ID: 580-39795-2

Client Sample ID: Perry-1

Lab Sample ID: 580-39795-1

Date Collected: 08/13/13 12:50
Matrix: Solid
Date Received: 08/15/13 09:45
Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			143323	08/23/13 13:27	MMH	TAL SEA
Total/NA	Analysis	8260B		1	143338	08/23/13 20:36	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	143186	08/22/13 13:31	JJP	TAL SEA

Client Sample ID: Perry-1-5

Lab Sample ID: 580-39795-6

Date Collected: 08/13/13 00:00
Matrix: Solid
Date Received: 08/15/13 09:45
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			143291	08/23/13 11:47	WW1	TAL SEA
Total/NA	Analysis	8270C SIM		1	143410	08/26/13 11:13	EKK	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: BNSF Parkwater

TestAmerica Job ID: 580-39795-2

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: 580-39795-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-39795-1	Perry-1	Solid	08/13/13 12:50	08/15/13 09:45
580-39795-6	Perry-1-5	Solid	08/13/13 00:00	08/15/13 09:45

>>> Select a Laboratory <<<
#N/A
#N/A
#N/A
#N/A

Chain of Custody Record

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TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ other MTCA

Client Contact	Project Manager: Howard Young	Site Contact: Howard Young	Date: 8/21/2013	COC No:
Kennedy/Jenks	Tel/Fax: 253-835-6431/ 253-952-3435	Lab Contact: Kris Allen	Carrier:	___ of ___ COCs
32001 32nd Avenue South Suite 100	Analysis Turnaround Time			Sampler:
Federal Way, WA 98001	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
P 253-835-6431	TAT if different from Below ___			Walk-in Client:
F 253-952-3435	☐ 2 weeks			Lab Sampling:
Project Name: Parkwater RA	☐ 1 week			
Site: Parkwater, Spokane, WA	☑ 2 days			Job / SDG No.:
P O # BNSF Direct Bill	☐ 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)	Volatile Organic Compounds (8021B/8260B-GC/MS per attached list)	Polycyclic Aromatic Hydrocarbons (8270D/SIM per the attached list)	Sample Specific Notes:
PERRY-1	8/13/13	12:50	G	S	3			X		Discreet sample
PERRY-1-5	8/13/13		C	S	1				X	Composite sample of Perry-1 to 5

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 Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ___ Corr'd: ___ | Therm ID No.: ___

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	KENNEDY JENKS	8/21/13 16:5	Received by:		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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

8/27/2013

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5755 8th Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047
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 #: 39795

CLIENT: BNSF

INVOICE TO: BNSF
BRUCE SHEPPERD

REPORT TO: HOWARD YOUNG
ADDRESS: KENNEDY/JENKS CONSULTANTS
32001 32ND AVE. SOUTH SUITE 100
FEDERAL WAY, WA 98001
PHONE: ~~425-435~~ ~~FAX~~ PH: 253-835-6431

P.O. NUMBER:

PROJECT NAME: PARKWATER RA

PROJECT NUMBER:

SAMPLED BY: HOWARD YOUNG

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 SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: COMPOSITE TO PERRY-1-5	REQUESTED ANALYSES: COMPOSITE TO AIRWAY-1-5	REQUESTED ANALYSES: RCRA 8 METALS	REQUESTED ANALYSES: TPH - HCID	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	*PERRY-1	8/13/13 12:50		X				S	3		-1
2	*PERRY-2	13:00		X				S	3		-2
3	*PERRY-3	13:15		X				S	3		-3
4	*PERRY-4	13:30		X				S	3		-4
5	*PERRY-5	13:40		X				S	3		-5 -6
6	**AIRWAY-1	15:35			X			S	3		-7
7	**AIRWAY-2	15:45			X			S	3		-8
8	**AIRWAY-3	15:50			X			S	3		-9
9	**AIRWAY-4	16:00			X			S	3		-10
10	**AIRWAY-5	16:10			X			S	3		-11 -12

580-39795 Chain of Custody

Cooler/TB Dig/IR cor 2.7 unc 2.5
Cooler Dsc Ice/Blue @ Lab
Wet/Packs Packing other
w/o Fedex P.O

RELEASED BY: Howard Young	DATE: 8/13/2013	RECEIVED BY: Cat Stapleton	DATE: 8-B-13
PRINT NAME: HOWARD YOUNG	FIRM: KENNEDY/JENKS	PRINT NAME: Cat Stapleton	FIRM: TestAmerica
	TIME: 17:15		TIME: 17:20
RELEASED BY: Cat Stapleton	DATE: 8/14/13	RECEIVED BY: Cathy Crandall	DATE: 8/15/13
PRINT NAME: Cat Stapleton	FIRM: TA-Spokane	PRINT NAME: Cathy Crandall	FIRM: TA Sea
	TIME: 16:00		TIME: 9:45

ADDITIONAL REMARKS: *COMPOSITE SAMPLES PERRY-1 THROUGH PERRY-5 INTO PERRY-1-5 ANALYZE COMPOSITE FOR RCRA 8 METALS AND TPH-HCID. HOLD REMAINDER OF SAMPLES.

TEMP: 5.6°C

PAGE OF

**COMPOSITE SAMPLES AIRWAY-1 THROUGH AIRWAY-5 INTO AIRWAY-1-15 AND ANALYZE COMPOSITE FOR RECRA 8 METALS AND TPH-HCID.

TAL-1000 (0612)

8/27/2013

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-39795-2

Login Number: 39795

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.	False	Received Trip Blank(s) not listed on 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	

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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: 580-46415-2
Client Project/Site: Parkwater

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

Attn: Laura Himes

Kristine D. Allen

Authorized for release by:
11/24/2014 9:12:50 AM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

Table of Contents

Job ID: 580-46415-2

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-46415-2

Comments
No additional comments.

Receipt
The samples were received on 11/20/2014 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9º C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

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

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

Metals
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.

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
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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-46415-2

Client Sample ID: CPMPR111914
Date Collected: 11/19/14 09:35
Date Received: 11/20/14 09:25

Lab Sample ID: 580-46415-1
Matrix: Solid
Percent Solids: 95.1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		5.6		mg/Kg	☼	11/20/14 14:14	11/21/14 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*50 - 150*	*11/20/14 14:14*	*11/21/14 02:30*	*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)	ND		26		mg/Kg	☼	11/20/14 11:33	11/20/14 17:15	1
Motor Oil (>C24-C36)	ND		52		mg/Kg	☼	11/20/14 11:33	11/20/14 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*50 - 150*	*11/20/14 11:33*	*11/20/14 17:15*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.7**		0.46		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10
Barium	**98**		0.18		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10
Cadmium	ND		0.18		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10
Chromium	**12**		0.18		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10
Lead	**5.8**		0.18		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10
Selenium	ND		0.64		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10
Silver	ND		0.18		mg/Kg	☼	11/21/14 10:51	11/21/14 13:41	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017		mg/Kg	☼	11/21/14 11:49	11/21/14 13:13	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-176383/1-A
Matrix: Solid
Analysis Batch: 176385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176383

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		4.0		mg/Kg		11/20/14 14:14	11/21/14 00:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*50 - 150*	*11/20/14 14:14*	*11/21/14 00:51*	*1*

Lab Sample ID: LCS 580-176383/2-A
Matrix: Solid
Analysis Batch: 176385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline	40.0	38.7		mg/Kg		97	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*50 - 150*

Lab Sample ID: LCSD 580-176383/3-A
Matrix: Solid
Analysis Batch: 176385

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 176383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline	40.0	39.9		mg/Kg		100	68 - 120	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*50 - 150*

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

Lab Sample ID: MB 580-176307/1-B
Matrix: Solid
Analysis Batch: 176371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		11/20/14 10:20	11/20/14 16:02	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		11/20/14 10:20	11/20/14 16:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*83*		*50 - 150*	*11/20/14 10:20*	*11/20/14 16:02*	*1*

Lab Sample ID: LCS 580-176307/2-B
Matrix: Solid
Analysis Batch: 176371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	500	477		mg/Kg		95	64 - 127
Motor Oil (>C24-C36)	502	542		mg/Kg		108	70 - 125

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

Lab Sample ID: LCS 580-176307/2-B
Matrix: Solid
Analysis Batch: 176371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176307

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	93		50 - 150

Lab Sample ID: LCSD 580-176307/3-B
Matrix: Solid
Analysis Batch: 176371

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 176307

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)			500	492		mg/Kg		98	64 - 127	3	16
Motor Oil (>C24-C36)			502	556		mg/Kg		111	70 - 125	3	17

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	94		50 - 150

Lab Sample ID: 580-46415-1 DU
Matrix: Solid
Analysis Batch: 176371

Client Sample ID: CPMPR111914
Prep Type: Total/NA
Prep Batch: 176307

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	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
o-Terphenyl	86		50 - 150

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-176443/6-A
Matrix: Solid
Analysis Batch: 176479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		11/21/14 10:51	11/21/14 12:56	10
Barium	ND		0.20		mg/Kg		11/21/14 10:51	11/21/14 12:56	10
Cadmium	ND		0.20		mg/Kg		11/21/14 10:51	11/21/14 12:56	10
Chromium	ND		0.20		mg/Kg		11/21/14 10:51	11/21/14 12:56	10
Lead	ND		0.20		mg/Kg		11/21/14 10:51	11/21/14 12:56	10
Selenium	ND		0.70		mg/Kg		11/21/14 10:51	11/21/14 12:56	10
Silver	ND		0.20		mg/Kg		11/21/14 10:51	11/21/14 12:56	10

Lab Sample ID: LCS 580-176443/7-A
Matrix: Solid
Analysis Batch: 176479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			200	202		mg/Kg		101	80 - 120		
Barium			200	212		mg/Kg		106	80 - 120		
Cadmium			5.00	5.24		mg/Kg		105	80 - 120		

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

Lab Sample ID: LCS 580-176443/7-A
Matrix: Solid
Analysis Batch: 176479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176443

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	20.0	20.0		mg/Kg		100	80 - 120
Lead	50.0	47.9		mg/Kg		96	80 - 120
Selenium	200	211		mg/Kg		105	80 - 120
Silver	30.0	28.6		mg/Kg		95	80 - 120

Lab Sample ID: LCSD 580-176443/8-A
Matrix: Solid
Analysis Batch: 176479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 176443

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	200	202		mg/Kg		101	80 - 120	0	20
Barium	200	211		mg/Kg		105	80 - 120	0	20
Cadmium	5.00	5.30		mg/Kg		106	80 - 120	1	20
Chromium	20.0	19.9		mg/Kg		99	80 - 120	1	20
Lead	50.0	48.1		mg/Kg		96	80 - 120	0	20
Selenium	200	208		mg/Kg		104	80 - 120	1	20
Silver	30.0	28.6		mg/Kg		95	80 - 120	0	20

Lab Sample ID: LCSSRM 580-176443/9-A
Matrix: Solid
Analysis Batch: 176479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176443

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	139	139		mg/Kg		99.9	70.4 - 140.3
Barium	203	213		mg/Kg		104.9	73.4 - 127.1
Cadmium	96.0	95.0		mg/Kg		98.9	73.2 - 127.1
Chromium	136	138		mg/Kg		101.2	69.9 - 129.4
Lead	133	127		mg/Kg		95.2	72.9 - 127.8
Selenium	177	184		mg/Kg		104.2	67.8 - 131.6
Silver	40.2	38.1		mg/Kg		94.8	66.2 - 134.1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-176458/6-A
Matrix: Solid
Analysis Batch: 176477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017		mg/Kg		11/21/14 11:49	11/21/14 13:06	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 580-176458/7-A
Matrix: Solid
Analysis Batch: 176477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176458

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.159		mg/Kg		96	80 - 120

Lab Sample ID: LCSD 580-176458/8-A
Matrix: Solid
Analysis Batch: 176477

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 176458

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.167	0.155		mg/Kg		93	80 - 120	3	20

Lab Sample ID: 580-46415-1 MS
Matrix: Solid
Analysis Batch: 176477

Client Sample ID: CPMPR111914
Prep Type: Total/NA
Prep Batch: 176458

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.166	0.172		mg/Kg	☼	103	80 - 120

Lab Sample ID: 580-46415-1 MSD
Matrix: Solid
Analysis Batch: 176477

Client Sample ID: CPMPR111914
Prep Type: Total/NA
Prep Batch: 176458

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.156	0.151		mg/Kg	☼	97	80 - 120	13	20

Lab Sample ID: 580-46415-1 DU
Matrix: Solid
Analysis Batch: 176477

Client Sample ID: CPMPR111914
Prep Type: Total/NA
Prep Batch: 176458

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-46415-2

Client Sample ID: CPMPR111914
Date Collected: 11/19/14 09:35
Date Received: 11/20/14 09:25

Lab Sample ID: 580-46415-1
Matrix: Solid
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			176383	11/20/14 14:14	CTC	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	176385	11/21/14 02:30	CJ	TAL SEA
Total/NA	Prep	3546			176307	11/20/14 11:33	TAA	TAL SEA
Total/NA	Cleanup	3630C			176372	11/20/14 13:08	TAA	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	176371	11/20/14 17:15	JJP	TAL SEA
Total/NA	Prep	3050B			176443	11/21/14 10:51	PAB	TAL SEA
Total/NA	Analysis	6020A		10	176479	11/21/14 13:41	FCW	TAL SEA
Total/NA	Prep	7471A			176458	11/21/14 11:49	PAB	TAL SEA
Total/NA	Analysis	7471A		1	176477	11/21/14 13:13	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: 580-46415-2

Laboratory: TestAmerica Seattle

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

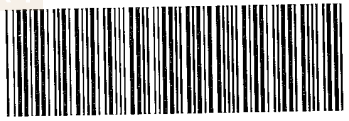
Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-15
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-46415-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-46415-1	CPMPR111914	Solid	11/19/14 09:35	11/20/14 09:25


580-46415 Chain of Custody

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

11/24/2014

CHAIN OF CUSTODY REPORT

Work Order #: 410415

CLIENT: BNSF

INVOICE TO: BNSF

REPORT TO: Laura Himes / Kennedy Jenks
ADDRESS: 32001 32nd Ave S, Ste 100
Federal Way, WA 98001
PHONE: 253.835.6400 FAX:

P.O. NUMBER:

PROJECT NAME: Parkwater
PROJECT NUMBER: 149610*06
SAMPLED BY: Alexander Lesher

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.

PRESERVATIVE: X

REQUESTED ANALYSES

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NWTPH Gx	Dx Diesel	Dx Heavy Oil	RCRA8	VOCs 8260 full	PAH SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 CPMPR111914	11/19/14 0935	X	X	X	X	X	X	S	6	Central PreMix Pit Run	
2 TRIP BLANK ana											
3											
4											
5											
6											
7											
8											
9											
10											

Cooler/TB Dig IR cor 0.0 unc 2.9 (2)
Cooler Dsc SM RTD @Lab
Wet/Packs Packing BUBBLE
w/cs FEDEX PO

RELEASED BY: PRINT NAME: Alexander Lesher FIRM: Kennedy Jenks DATE: 11-19-14 TIME: 1020
RECEIVED BY: PRINT NAME: Cat Stapleton FIRM: TestAmerica DATE: 11-19-14 TIME: 10:20

RELEASED BY: PRINT NAME: Cat Stapleton FIRM: TestAmerica-Spokane DATE: 11-19-14 TIME: 15:35
RECEIVED BY: PRINT NAME: Tom Blankinship FIRM: TA-Sea DATE: 11/20/14 TIME: 0925

ADDITIONAL REMARKS: Composite Sample Collected from top coarse at Central PreMix Pit Run

TEMP:

PAGE OF

TAL-1000 (0714)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-46415-2

Login Number: 46415

List Source: TestAmerica Seattle

List Number: 1

Creator: Abello, Andrea N

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	Received Trip Blank not listed on 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	

Appendix C

Documentation of Waste Characterization

C-1: Waste Profiles

REPUBLIC SERVICES **SPECIAL WASTE PROFILE**

Requested Disposal Facility: 4178 Roosevelt Regional MSW LF WA

Waste Profile #
Sales Rep #:

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

Generator Name: BNSF Railway Company			
Generator Site Address: 5324 E Trent			
City: Spokane	County: Spokane	State: Washington	Zip: 99212
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different): ☑ 2454 Occidental Avenue			
City: Seattle	County: King	State: Washington	Zip: 98134-1451
Generator Contact Name: Bruce Sheppard		Email: Bruce.Sheppard@bnsf.com	
Phone Number: 625-6007	Ext:	Fax Number: (206) 625-6007	

II. Billing Information

Bill To: BNSF Railway Company		Contact Name: Bruce Sheppard	
Billing Address: 2454 Occidental Avenue		Email: Bruce.Sheppard@bnsf.com	
City: Seattle	State: Washington	Zip: 98134	Phone: (206) 625-6035

III. Waste Stream Information

Name of Waste: BNSF Parkwater Facility Soil Remedial Action 2013	
Process Generating Waste: Soil removed from railroad track areas that has been impacted by diesel fuel, motor or lubrication oil and metals.	
Type of Waste:	☐ INDUSTRIAL PROCESS WASTE ☑ POLLUTION CONTROL WASTE
Physical State:	☑ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID
Method of Shipment:	☑ BULK ☐ DRUM ☐ BAGGED ☐ OTHER:
Estimated Annual Volume:	4,000 Cubic Yards
Frequency:	☑ ONE TIME ☐ ONGOING
Disposal Consideration:	☑ LANDFILL ☐ SOLIDIFICATION ☐ BIOREMEDIATION

IV. Representative Sample Certification

☐ NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☑ YES or ☐ NO
Type of Sample: ☑ COMPOSITE SAMPLE ☑ GRAB SAMPLE	
Sample Date: 9/20/2013	
Sample ID Numbers: Twelve Soil Samples SP-A7A1-092013; SP-A7A2-092013; SP-A7B1-092013; SP-A7B2-092013; SP-A7C1-092013; SP-A7C2-092013;SP-A7D1-092013; SP-A7D2-092013; SP-A7E1-092013; SP-A7E2-092013; RLT-SP1-091813 and RLT-SP2-091813	

Waste Profile #

V. Physical Characteristics of Waste

Characteristic Components	% by Weight (range)
1. Soil: silty sand to silty gravel with cobbles/boulders to sand with gravel & cobbles	100
2.	
3.	
4.	
5.	

Color	Odor (describe)	Does Waste Contain Free Liquids?	% Solids	pH:	Flash Point
Brown/dk brn	NA	☐ YES or ☑ NO	100	NA	NA °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes or ☑ No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes or ☑ No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes or ☑ No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes or ☑ No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes or ☑ No
Is this waste a reactive or heat generating waste?	☐ Yes or ☑ No
Does the waste contain sulfur or sulfur by-products?	☐ Yes or ☑ No
Is this waste generated at a Federal Superfund Clean Up Site?	☐ Yes or ☑ No
Is this waste from a TSD facility, TSD like facility or consolidator?	☐ Yes or ☑ No

VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

Bruce Sheppard	BNSF Railway
Authorized Representative Name And Title (Type or Print)	Company Name
Authorized Representative Signature	10/8/2013 Date

REPUBLIC SERVICES, INC.

SPECIAL WASTE PROFILE - RECERTIFICATION

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed

Disposal Facility:	4178 Roosevelt Regional MSW LF WA	Waste Profile #
		41781317273

I. Generator Information

Generator Name: BNSF Railway Company			
Generator Site Address: 5324 E. Trent			
City: Spokane	County: Spokane	State: Washington	Zip: 99212
State ID/Reg No:	State Approval/Waste Code:		NAICS #:
Generator Mailing Address (if different): ■ 2454 Occidental Ave. South			
City: Seattle	County: King	State: Washington	Zip: 98134
Generator Contact Name: Bruce Sheppart		Email:	
Phone Number: (206) 625-6635		Fax Number:	

II. Waste Stream Information

Name of Waste: Soil

Check Section 1 OR Section 2 below:

1. ☐ There has been a change in the characteristics of the waste stream due to the following:
   a. Change of a raw material used in the waste generating process.
   b. Change in the waste generating process itself.
   c. Change in a physical characteristic of the waste.
   d. New information has been documented concerning the human health effects of exposure to the waste.

   If any of these changes have occurred, a new laboratory analysis and profile sheet must be completed. Attach copies of the new chemical analysis and new Special Waste Profile with the appropriate signatures.

2. ■ There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.

III. Representative Sample Certification

■ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☐ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained in the Special Waste Profile - Recertification and the information in the Original Special Waste Profile is true, complete and accurate.

Bruce Sheppard-Environmental Manager	BNSF Railway
Authorized Representative Name And Title (Printed)	Company Name
	11/04/2014
Authorized Representative Signature	Date

REPUBLIC SERVICES

SPECIAL WASTE PROFILE – CHANGE

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

I. Generator Information

This form may be used to request changes to an existing Special Waste Profile.			
Generator Name:	BNSF Railway		
Name of Waste:	Soil	Waste Profile #	41781317273

II. Purpose of Change

Description of Change Requested and Reason for Change: (Provide detailed explanation of why the change is requested following the appropriate checked box below).

- ☐ Volume Increase By:
  Is the analysis originally submitted with the Profile representative of the volume Increase? ☐ Yes ☐ No If No, complete Section III, below.
- ☒ Extend Expiration Date: March 2015
- ☐ Change or Add Landfill:
- ☒ Add Additional Laboratory Reports: **Complete Representative Sample Certification, Section III, below.**
- ☐ Add MSDS:
- ☐ Generator Name Change:
- ☐ Other:
  Work was originally to take place spring 2014. Republic Services did not have the rail capacity to handle this work until November 2014

III. Representative Sample Certification

☐ No Sample Taken

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?	☒ YES or ☐ NO

Type of Sample: ☐ COMPOSITE SAMPLE ☐ GRAB SAMPLE

Sample Date:

Sample ID Numbers:

IV. Certification

I hereby certify that the waste and the process generating the waste are unchanged and are accurately represented in the original profile.

Bruce Sheppard-Environmental Manager	BNSF Railway
Authorized Representative Name and Title (Printed)	Company Name
B Sheppard	11/04/2014
Authorized Representative Signature	Date

C-2: Laboratory Analytical Reports

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: 580-40428-1
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:
10/14/2013 5:48:57 PM

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

Table of Contents

Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Job ID: 580-40428-1

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 2.7º C and 4.7º C.

GC/MS VOA - Method(s) 8260B
The following sample(s) were received as bulk soil for method 8260: DS-SP2-092013 (580-40428-1). The sample was extracted into methanol by the laboratory more than 48 hours after sampling. The data have been qualified and reported.

The RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 145776 recovered outside control limits for Benzene. The individual recoveries of the LCS and LCSD were within control limits. No further action was taken on this outlier.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C
A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCS/LCSD associated with prep batch 146384 had 3 analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

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.

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Client Sample ID: DS-SP2-092013
Date Collected: 09/20/13 12:55
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40428-1
Matrix: Solid
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,1,1-Trichloroethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,1-Dichloroethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,1-Dichloropropene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2,3-Trichlorobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2,3-Trichloropropane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2,4-Trichlorobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2,4-Trimethylbenzene	**120**	**H**	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2-Dichloroethane	ND	H	18		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,3,5-Trimethylbenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,3-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,3-Dichloropropane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
1,4-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
2,2-Dichloropropane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
2-Chlorotoluene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
4-Chlorotoluene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
4-Isopropyltoluene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Acetone	ND	H	440		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Benzene	ND	H *	18		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Bromobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Bromoform	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Bromomethane	ND	H	150		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Chlorobenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Chlorobromomethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Chloroethane	ND	H	440		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Chloroform	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Chloromethane	ND	H	440		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
cis-1,2-Dichloroethene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
cis-1,3-Dichloropropene	ND	H	18		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Dibromomethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Dichlorobromomethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Dichlorodifluoromethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Ethylbenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Ethylene Dibromide	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Hexachlorobutadiene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Isopropylbenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Methyl tert-butyl ether	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Methylene Chloride	ND	H	18		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
m-Xylene & p-Xylene	**190**	**H**	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Naphthalene	**92**	**H**	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
n-Butylbenzene	**52**	**H**	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Client Sample ID: DS-SP2-092013
Date Collected: 09/20/13 12:55
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40428-1
Matrix: Solid
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
o-Xylene	**130**	**H**	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
sec-Butylbenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Styrene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
tert-Butylbenzene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Tetrachloroethene	ND	H	22		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Toluene	**120**	**H**	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
trans-1,2-Dichloroethene	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
trans-1,3-Dichloropropene	ND	H	18		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Trichloroethene	ND	H	18		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Trichlorofluoromethane	ND	H	44		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1
Vinyl chloride	ND	H	8.8		ug/Kg	☼	09/23/13 18:22	09/25/13 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 120*	*09/23/13 18:22*	*09/25/13 20:08*	*1*
Ethylbenzene-d10	*104*		*70 - 120*	*09/23/13 18:22*	*09/25/13 20:08*	*1*
Fluorobenzene (Surr)	*96*		*80 - 120*	*09/23/13 18:22*	*09/25/13 20:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*	*09/23/13 18:22*	*09/25/13 20:08*	*1*
Trifluorotoluene (Surr)	*97*		*65 - 140*	*09/23/13 18:22*	*09/25/13 20:08*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**90**		0.10		%			09/26/13 14:29	1
Percent Moisture	**10**		0.10		%			09/26/13 14:29	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Client Sample ID: DS-SP1-092013
Date Collected: 09/20/13 12:57
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40428-2
Matrix: Solid
Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Bis(2-chloroethyl)ether	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2-Chlorophenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
1,3-Dichlorobenzene	ND		260		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
1,4-Dichlorobenzene	ND		260		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzyl alcohol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
1,2-Dichlorobenzene	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2-Methylphenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
3 & 4 Methylphenol	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
N-Nitrosodi-n-propylamine	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Hexachloroethane	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Nitrobenzene	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Isophorone	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2-Nitrophenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,4-Dimethylphenol	ND	*	520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzoic acid	ND		13000		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Bis(2-chloroethoxy)methane	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,4-Dichlorophenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
1,2,4-Trichlorobenzene	ND		260		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Naphthalene	**160**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4-Chloroaniline	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Hexachlorobutadiene	ND		260		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4-Chloro-3-methylphenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2-Methylnaphthalene	**290**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Hexachlorocyclopentadiene	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,4,6-Trichlorophenol	ND		780		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,4,5-Trichlorophenol	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2-Chloronaphthalene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2-Nitroaniline	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Dimethyl phthalate	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Acenaphthylene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,6-Dinitrotoluene	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
3-Nitroaniline	ND	*	520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Acenaphthene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,4-Dinitrophenol	ND		5200		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4-Nitrophenol	ND		5200		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Dibenzofuran	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
2,4-Dinitrotoluene	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Diethyl phthalate	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4-Chlorophenyl phenyl ether	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Fluorene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4-Nitroaniline	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4,6-Dinitro-2-methylphenol	ND		5200		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
N-Nitrosodiphenylamine	ND		260		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
4-Bromophenyl phenyl ether	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Hexachlorobenzene	ND		260		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Pentachlorophenol	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Phenanthrene	**320**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Anthracene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Client Sample ID: DS-SP1-092013
Date Collected: 09/20/13 12:57
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40428-2
Matrix: Solid
Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		2600		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Fluoranthene	**1000**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Pyrene	**770**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Butyl benzyl phthalate	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
3,3'-Dichlorobenzidine	ND	*	1000		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzo[a]anthracene	**610**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Chrysene	**900**		130		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Bis(2-ethylhexyl) phthalate	ND		3100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Di-n-octyl phthalate	ND		2600		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzo[a]pyrene	**270**		160		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Indeno[1,2,3-cd]pyrene	**240**		210		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Dibenz(a,h)anthracene	ND		210		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzo[g,h,i]perylene	**200**		130		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Carbazole	ND		520		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
1-Methylnaphthalene	**220**		160		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzo[b]fluoranthene	**1100**		100		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
Benzo[k]fluoranthene	**320**		130		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5
bis (2-chloroisopropyl) ether	ND		1300		ug/Kg	☼	10/02/13 13:15	10/03/13 15:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*87*		*36 - 145*	*10/02/13 13:15*	*10/03/13 15:41*	*5*
Phenol-d5	*87*		*38 - 149*	*10/02/13 13:15*	*10/03/13 15:41*	*5*
Nitrobenzene-d5	*89*		*38 - 141*	*10/02/13 13:15*	*10/03/13 15:41*	*5*
2-Fluorobiphenyl	*85*		*42 - 140*	*10/02/13 13:15*	*10/03/13 15:41*	*5*
2,4,6-Tribromophenol	*67*		*28 - 143*	*10/02/13 13:15*	*10/03/13 15:41*	*5*
Terphenyl-d14	*90*		*42 - 151*	*10/02/13 13:15*	*10/03/13 15:41*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1
PCB-1221	ND		0.012		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1
PCB-1232	ND		0.012		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1
PCB-1242	ND		0.011		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1
PCB-1248	ND		0.011		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1
PCB-1254	ND		0.011		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1
PCB-1260	**0.024**		0.011		mg/Kg	☼	09/23/13 14:14	09/26/13 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*45 - 135*	*09/23/13 14:14*	*09/26/13 21:58*	*1*
DCB Decachlorobiphenyl	*85*		*50 - 140*	*09/23/13 14:14*	*09/26/13 21:58*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:36	10/14/13 09:26	1
Barium	**0.57**		0.010		mg/L		10/13/13 12:36	10/14/13 09:26	1
Cadmium	ND		0.010		mg/L		10/13/13 12:36	10/14/13 09:26	1
Chromium	ND		0.025		mg/L		10/13/13 12:36	10/14/13 09:26	1
Lead	**0.036**		0.030		mg/L		10/13/13 12:36	10/14/13 09:26	1
Selenium	ND		0.10		mg/L		10/13/13 12:36	10/14/13 09:26	1
Silver	ND		0.050		mg/L		10/13/13 12:36	10/14/13 09:26	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Client Sample ID: DS-SP1-092013
Date Collected: 09/20/13 12:57
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40428-2
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			09/26/13 14:29	1
Percent Moisture	8.5		0.10		%			09/26/13 14:29	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,1,1-Trichloroethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,1,2-Trichloroethane	ND		12		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,1-Dichloroethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,1-Dichloroethene	ND		20		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,1-Dichloropropene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2,3-Trichloropropane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2-Dichlorobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2-Dichloroethane	ND		16		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,2-Dichloropropane	ND		12		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,3-Dichlorobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,3-Dichloropropane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
1,4-Dichlorobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
2,2-Dichloropropane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
2-Chlorotoluene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
4-Chlorotoluene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
4-Isopropyltoluene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Acetone	ND		400		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Benzene	ND		16		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Bromobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Bromoform	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Bromomethane	ND		140		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Carbon tetrachloride	ND		20		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Chlorobenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Chlorobromomethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Chlorodibromomethane	ND		20		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Chloroethane	ND		400		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Chloroform	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Chloromethane	ND		400		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
cis-1,2-Dichloroethene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
cis-1,3-Dichloropropene	ND		16		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Dibromomethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Dichlorobromomethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Dichlorodifluoromethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Ethylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Ethylene Dibromide	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Hexachlorobutadiene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Isopropylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Methyl tert-butyl ether	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Methylene Chloride	ND		16		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
m-Xylene & p-Xylene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Naphthalene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
N-Propylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
o-Xylene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
sec-Butylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Styrene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
tert-Butylbenzene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Tetrachloroethene	ND		20		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Toluene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
trans-1,2-Dichloroethene	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
trans-1,3-Dichloropropene	ND		16		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Trichloroethene	ND		16		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Trichlorofluoromethane	ND		40		ug/Kg		09/25/13 11:00	09/25/13 12:19	1
Vinyl chloride	ND		8.0		ug/Kg		09/25/13 11:00	09/25/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 120*	*09/25/13 11:00*	*09/25/13 12:19*	*1*
Ethylbenzene-d10	*116*		*70 - 120*	*09/25/13 11:00*	*09/25/13 12:19*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*09/25/13 11:00*	*09/25/13 12:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*	*09/25/13 11:00*	*09/25/13 12:19*	*1*
Trifluorotoluene (Surr)	*102*		*65 - 140*	*09/25/13 11:00*	*09/25/13 12:19*	*1*

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	651		ug/Kg		81	72 - 123
1,1,1-Trichloroethane	800	700		ug/Kg		87	63 - 135
1,1,2,2-Tetrachloroethane	800	755		ug/Kg		94	73 - 125
1,1,2-Trichloroethane	800	772		ug/Kg		96	77 - 124
1,1-Dichloroethane	800	766		ug/Kg		96	70 - 128
1,1-Dichloroethene	800	764		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 123
1,2,3-Trichlorobenzene	800	521		ug/Kg		65	61 - 130
1,2,3-Trichloropropane	800	803		ug/Kg		100	77 - 123
1,2,4-Trichlorobenzene	800	589		ug/Kg		74	61 - 130
1,2,4-Trimethylbenzene	800	762		ug/Kg		95	79 - 124
1,2-Dibromo-3-Chloropropane	800	424		ug/Kg		53	53 - 132
1,2-Dichlorobenzene	800	756		ug/Kg		94	79 - 117
1,2-Dichloroethane	800	674		ug/Kg		84	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	754		ug/Kg		94	80 - 125
1,3-Dichlorobenzene	800	758		ug/Kg		95	79 - 119
1,3-Dichloropropane	800	786		ug/Kg		98	77 - 123
1,4-Dichlorobenzene	800	745		ug/Kg		93	79 - 117
2,2-Dichloropropane	800	711		ug/Kg		89	56 - 144
2-Chlorotoluene	800	778		ug/Kg		97	79 - 122
4-Chlorotoluene	800	821		ug/Kg		103	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	731		ug/Kg		91	78 - 126
Acetone	3200	2340		ug/Kg		73	20 - 160
Benzene	800	971		ug/Kg		121	70 - 128
Bromobenzene	800	793		ug/Kg		99	80 - 120
Bromoform	800	491		ug/Kg		61	50 - 124
Bromomethane	800	950		ug/Kg		119	57 - 148
Carbon tetrachloride	800	693		ug/Kg		87	59 - 145
Chlorobenzene	800	809		ug/Kg		101	75 - 120
Chlorobromomethane	800	741		ug/Kg		93	78 - 123
Chlorodibromomethane	800	609		ug/Kg		76	69 - 129
Chloroethane	800	839		ug/Kg		105	48 - 167
Chloroform	800	775		ug/Kg		97	78 - 125
Chloromethane	800	696		ug/Kg		87	55 - 136
cis-1,2-Dichloroethene	800	772		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	800	693		ug/Kg		87	69 - 129
Dibromomethane	800	793		ug/Kg		99	78 - 126
Dichlorobromomethane	800	580		ug/Kg		73	58 - 133
Dichlorodifluoromethane	800	700		ug/Kg		88	38 - 150
Ethylbenzene	800	814		ug/Kg		102	78 - 126
Ethylene Dibromide	800	803		ug/Kg		100	69 - 126
Hexachlorobutadiene	800	723		ug/Kg		90	68 - 134
Isopropylbenzene	800	804		ug/Kg		100	79 - 127
Methyl tert-butyl ether	800	690		ug/Kg		86	65 - 125
Methylene Chloride	800	770		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	829		ug/Kg		104	78 - 126
Naphthalene	800	577		ug/Kg		72	14 - 170
n-Butylbenzene	800	659		ug/Kg		82	78 - 128
N-Propylbenzene	800	772		ug/Kg		96	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	722		ug/Kg		90	78 - 128
Styrene	800	850		ug/Kg		106	79 - 127
tert-Butylbenzene	800	764		ug/Kg		95	71 - 136
Tetrachloroethene	800	840		ug/Kg		105	56 - 150
Toluene	800	817		ug/Kg		102	75 - 126
trans-1,2-Dichloroethene	800	768		ug/Kg		96	76 - 131
trans-1,3-Dichloropropene	800	664		ug/Kg		83	72 - 129
Trichloroethene	800	807		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	701		ug/Kg		88	47 - 165
Vinyl chloride	800	741		ug/Kg		93	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*99*		*70 - 120*
Fluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	800	667		ug/Kg		83	72 - 123	2	20
1,1,1-Trichloroethane	800	715		ug/Kg		89	63 - 135	2	20
1,1,2,2-Tetrachloroethane	800	783		ug/Kg		98	73 - 125	4	22
1,1,2-Trichloroethane	800	780		ug/Kg		97	77 - 124	1	18
1,1-Dichloroethane	800	800		ug/Kg		100	70 - 128	4	21
1,1-Dichloroethene	800	744		ug/Kg		93	70 - 133	3	23
1,1-Dichloropropene	800	815		ug/Kg		102	77 - 123	0	16
1,2,3-Trichlorobenzene	800	544		ug/Kg		68	61 - 130	4	23
1,2,3-Trichloropropane	800	807		ug/Kg		101	77 - 123	1	23
1,2,4-Trichlorobenzene	800	618		ug/Kg		77	61 - 130	5	22
1,2,4-Trimethylbenzene	800	761		ug/Kg		95	79 - 124	0	18
1,2-Dibromo-3-Chloropropane	800	465		ug/Kg		58	53 - 132	9	27
1,2-Dichlorobenzene	800	743		ug/Kg		93	79 - 117	2	17
1,2-Dichloroethane	800	758		ug/Kg		95	71 - 128	12	18
1,2-Dichloropropane	800	1010		ug/Kg		126	76 - 161	4	15
1,3,5-Trimethylbenzene	800	759		ug/Kg		95	80 - 125	1	18
1,3-Dichlorobenzene	800	759		ug/Kg		95	79 - 119	0	17
1,3-Dichloropropane	800	808		ug/Kg		101	77 - 123	3	19
1,4-Dichlorobenzene	800	747		ug/Kg		93	79 - 117	0	18
2,2-Dichloropropane	800	717		ug/Kg		90	56 - 144	1	21
2-Chlorotoluene	800	808		ug/Kg		101	79 - 122	4	18
4-Chlorotoluene	800	786		ug/Kg		98	80 - 122	4	18
4-Isopropyltoluene	800	711		ug/Kg		89	78 - 126	3	18
Acetone	3200	2660		ug/Kg		83	20 - 160	13	30
Benzene	800	783	*	ug/Kg		98	70 - 128	21	19
Bromobenzene	800	815		ug/Kg		102	80 - 120	3	19
Bromoform	800	525		ug/Kg		66	50 - 124	7	25
Bromomethane	800	958		ug/Kg		120	57 - 148	1	29
Carbon tetrachloride	800	723		ug/Kg		90	59 - 145	4	19
Chlorobenzene	800	809		ug/Kg		101	75 - 120	0	21
Chlorobromomethane	800	814		ug/Kg		102	78 - 123	9	19
Chlorodibromomethane	800	616		ug/Kg		77	69 - 129	1	23
Chloroethane	800	931		ug/Kg		116	48 - 167	10	53
Chloroform	800	788		ug/Kg		98	78 - 125	2	17
Chloromethane	800	751		ug/Kg		94	55 - 136	8	26
cis-1,2-Dichloroethene	800	797		ug/Kg		100	70 - 130	3	19
cis-1,3-Dichloropropene	800	677		ug/Kg		85	69 - 129	2	19
Dibromomethane	800	788		ug/Kg		98	78 - 126	1	18
Dichlorobromomethane	800	587		ug/Kg		73	58 - 133	1	19
Dichlorodifluoromethane	800	729		ug/Kg		91	38 - 150	4	26
Ethylbenzene	800	823		ug/Kg		103	78 - 126	1	23
Ethylene Dibromide	800	838		ug/Kg		105	69 - 126	4	21
Hexachlorobutadiene	800	698		ug/Kg		87	68 - 134	4	21
Isopropylbenzene	800	783		ug/Kg		98	79 - 127	3	20
Methyl tert-butyl ether	800	744		ug/Kg		93	65 - 125	8	30
Methylene Chloride	800	773		ug/Kg		97	57 - 146	0	21
m-Xylene & p-Xylene	800	838		ug/Kg		105	78 - 126	1	23
Naphthalene	800	632		ug/Kg		79	14 - 170	9	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145824

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			800	659		ug/Kg		82	78 - 128	0	17
N-Propylbenzene			800	764		ug/Kg		95	81 - 127	1	20
o-Xylene			800	800		ug/Kg		100	77 - 127	0	22
sec-Butylbenzene			800	724		ug/Kg		90	78 - 128	0	17
Styrene			800	846		ug/Kg		106	79 - 127	1	21
tert-Butylbenzene			800	755		ug/Kg		94	71 - 136	1	27
Tetrachloroethene			800	815		ug/Kg		102	56 - 150	3	27
Toluene			800	807		ug/Kg		101	75 - 126	1	19
trans-1,2-Dichloroethene			800	789		ug/Kg		99	76 - 131	3	18
trans-1,3-Dichloropropene			800	683		ug/Kg		85	72 - 129	3	20
Trichloroethene			800	811		ug/Kg		101	83 - 124	0	17
Trichlorofluoromethane			800	690		ug/Kg		86	47 - 165	2	54
Vinyl chloride			800	754		ug/Kg		94	67 - 131	2	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*
Ethylbenzene-d10	*100*		*70 - 120*
Fluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*65 - 140*

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

Lab Sample ID: MB 580-146384/1-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Chlorophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,3-Dichlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,4-Dichlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzyl alcohol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,2-Dichlorobenzene	ND		55		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Methylphenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
3 & 4 Methylphenol	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachloroethane	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Nitrobenzene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Isophorone	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Nitrophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dimethylphenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzoic acid	ND		2500		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dichlorophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Naphthalene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1

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

Lab Sample ID: MB 580-146384/1-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachlorobutadiene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Chloro-3-methylphenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Methylnaphthalene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachlorocyclopentadiene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4,6-Trichlorophenol	ND		150		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4,5-Trichlorophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Chloronaphthalene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Nitroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Dimethyl phthalate	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Acenaphthylene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,6-Dinitrotoluene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
3-Nitroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Acenaphthene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dinitrophenol	ND		1000		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Nitrophenol	ND		1000		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Dibenzofuran	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dinitrotoluene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Diethyl phthalate	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Fluorene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Nitroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
N-Nitrosodiphenylamine	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Pentachlorophenol	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Phenanthrene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Anthracene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Di-n-butyl phthalate	ND		500		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Fluoranthene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Pyrene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Butyl benzyl phthalate	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[a]anthracene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Chrysene	ND		25		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Di-n-octyl phthalate	ND		500		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[a]pyrene	ND		30		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Dibenz(a,h)anthracene	ND		40		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[g,h,i]perylene	ND		25		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Carbazole	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1-Methylnaphthalene	ND		30		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[b]fluoranthene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[k]fluoranthene	ND		25		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg		10/02/13 12:47	10/02/13 17:58	1

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

Lab Sample ID: MB 580-146384/1-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146384

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	82		36 - 145	10/02/13 12:47	10/02/13 17:58	1
Phenol-d5	78		38 - 149	10/02/13 12:47	10/02/13 17:58	1
Nitrobenzene-d5	75		38 - 141	10/02/13 12:47	10/02/13 17:58	1
2-Fluorobiphenyl	71		42 - 140	10/02/13 12:47	10/02/13 17:58	1
2,4,6-Tribromophenol	63		28 - 143	10/02/13 12:47	10/02/13 17:58	1
Terphenyl-d14	80		42 - 151	10/02/13 12:47	10/02/13 17:58	1

Lab Sample ID: LCS 580-146384/2-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1130		ug/Kg		113	66 - 126
Bis(2-chloroethyl)ether	998	873		ug/Kg		88	57 - 122
2-Chlorophenol	1000	1170		ug/Kg		117	65 - 125
1,3-Dichlorobenzene	1000	958		ug/Kg		96	64 - 124
1,4-Dichlorobenzene	1010	954		ug/Kg		94	62 - 132
Benzyl alcohol	997	850		ug/Kg		85	42 - 147
1,2-Dichlorobenzene	1010	923		ug/Kg		92	68 - 118
2-Methylphenol	997	937		ug/Kg		94	56 - 121
3 & 4 Methylphenol	1000	1060		ug/Kg		106	61 - 126
N-Nitrosodi-n-propylamine	1000	955		ug/Kg		95	52 - 127
Hexachloroethane	1010	927		ug/Kg		92	56 - 131
Nitrobenzene	1020	1010		ug/Kg		99	59 - 134
Isophorone	988	1090		ug/Kg		110	53 - 118
2-Nitrophenol	1010	1190		ug/Kg		119	58 - 128
2,4-Dimethylphenol	1010	1430	*	ug/Kg		142	58 - 133
Benzoic acid	5090	4840		ug/Kg		95	10 - 130
Bis(2-chloroethoxy)methane	998	915		ug/Kg		92	63 - 128
2,4-Dichlorophenol	1020	1200		ug/Kg		118	59 - 124
1,2,4-Trichlorobenzene	1000	903		ug/Kg		90	63 - 128
Naphthalene	1010	888		ug/Kg		88	64 - 129
4-Chloroaniline	983	276		ug/Kg		28	20 - 181
Hexachlorobutadiene	1000	908		ug/Kg		91	59 - 134
4-Chloro-3-methylphenol	1010	1110		ug/Kg		110	58 - 128
2-Methylnaphthalene	991	899		ug/Kg		91	65 - 125
Hexachlorocyclopentadiene	1000	719		ug/Kg		72	30 - 132
2,4,6-Trichlorophenol	1010	986		ug/Kg		98	66 - 131
2,4,5-Trichlorophenol	1010	904		ug/Kg		89	64 - 124
2-Chloronaphthalene	1000	910		ug/Kg		91	69 - 129
2-Nitroaniline	983	844		ug/Kg		86	58 - 133
Dimethyl phthalate	1000	1020		ug/Kg		102	65 - 125
Acenaphthylene	1000	968		ug/Kg		97	69 - 129
2,6-Dinitrotoluene	1000	902		ug/Kg		90	65 - 125
3-Nitroaniline	987	372	*	ug/Kg		38	80 - 165
Acenaphthene	1000	874		ug/Kg		87	65 - 130
2,4-Dinitrophenol	5060	3730		ug/Kg		74	53 - 168
4-Nitrophenol	5030	4450		ug/Kg		88	47 - 172

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

Lab Sample ID: LCS 580-146384/2-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	1010	924		ug/Kg		92	70 - 125
2,4-Dinitrotoluene	1000	990		ug/Kg		99	57 - 122
Diethyl phthalate	1000	936		ug/Kg		93	64 - 129
4-Chlorophenyl phenyl ether	992	939		ug/Kg		95	65 - 130
Fluorene	1010	940		ug/Kg		93	68 - 128
4-Nitroaniline	991	732		ug/Kg		74	70 - 150
4,6-Dinitro-2-methylphenol	5060	4620		ug/Kg		91	38 - 143
N-Nitrosodiphenylamine	1000	1080		ug/Kg		108	88 - 153
4-Bromophenyl phenyl ether	1000	947		ug/Kg		95	64 - 134
Hexachlorobenzene	1000	924		ug/Kg		92	61 - 136
Pentachlorophenol	1000	1000		ug/Kg		100	29 - 124
Phenanthrene	1000	848		ug/Kg		85	65 - 125
Anthracene	1010	907		ug/Kg		90	73 - 123
Di-n-butyl phthalate	1000	969		ug/Kg		97	69 - 124
Fluoranthene	1000	948		ug/Kg		95	61 - 121
Pyrene	998	899		ug/Kg		90	54 - 134
Butyl benzyl phthalate	1000	952		ug/Kg		95	65 - 140
3,3'-Dichlorobenzidine	1980	1050	*	ug/Kg		53	73 - 163
Benzo[a]anthracene	1000	887		ug/Kg		88	64 - 124
Chrysene	992	860		ug/Kg		87	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1000		ug/Kg		100	64 - 144
Di-n-octyl phthalate	1010	908		ug/Kg		90	58 - 148
Benzo[a]pyrene	1000	896		ug/Kg		90	68 - 128
Indeno[1,2,3-cd]pyrene	998	869		ug/Kg		87	59 - 139
Dibenz(a,h)anthracene	1000	951		ug/Kg		95	57 - 142
Benzo[g,h,i]perylene	1010	1060		ug/Kg		105	57 - 142
Carbazole	1010	924		ug/Kg		92	88 - 158
1-Methylnaphthalene	997	941		ug/Kg		94	48 - 148
Benzo[b]fluoranthene	1000	987		ug/Kg		98	66 - 136
Benzo[k]fluoranthene	1010	933		ug/Kg		93	63 - 143
bis (2-chloroisopropyl) ether	993	733		ug/Kg		74	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*99*		*36 - 145*
Phenol-d5	*94*		*38 - 149*
Nitrobenzene-d5	*90*		*38 - 141*
2-Fluorobiphenyl	*83*		*42 - 140*
2,4,6-Tribromophenol	*83*		*28 - 143*
Terphenyl-d14	*92*		*42 - 151*

Lab Sample ID: LCSD 580-146384/3-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1130		ug/Kg		113	66 - 126	1	26
Bis(2-chloroethyl)ether	998	906		ug/Kg		91	57 - 122	4	60
2-Chlorophenol	1000	1190		ug/Kg		119	65 - 125	2	27

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

Lab Sample ID: LCSD 580-146384/3-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1000	953		ug/Kg		95	64 - 124	1	60
1,4-Dichlorobenzene	1010	956		ug/Kg		94	62 - 132	0	32
Benzyl alcohol	997	868		ug/Kg		87	42 - 147	2	60
1,2-Dichlorobenzene	1010	930		ug/Kg		92	68 - 118	1	60
2-Methylphenol	997	976		ug/Kg		98	56 - 121	4	25
3 & 4 Methylphenol	1000	1060		ug/Kg		106	61 - 126	0	27
N-Nitrosodi-n-propylamine	1000	962		ug/Kg		96	52 - 127	1	28
Hexachloroethane	1010	951		ug/Kg		94	56 - 131	3	60
Nitrobenzene	1020	1070		ug/Kg		105	59 - 134	6	60
Isophorone	988	1100		ug/Kg		111	53 - 118	1	60
2-Nitrophenol	1010	1260		ug/Kg		125	58 - 128	5	60
2,4-Dimethylphenol	1010	1450	*	ug/Kg		144	58 - 133	1	60
Benzoic acid	5090	5060		ug/Kg		99	10 - 130	4	60
Bis(2-chloroethoxy)methane	998	936		ug/Kg		94	63 - 128	2	60
2,4-Dichlorophenol	1020	1250		ug/Kg		123	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	932		ug/Kg		93	63 - 128	3	28
Naphthalene	1010	905		ug/Kg		90	64 - 129	2	26
4-Chloroaniline	983	353		ug/Kg		36	20 - 181	24	60
Hexachlorobutadiene	1000	941		ug/Kg		94	59 - 134	4	60
4-Chloro-3-methylphenol	1010	1130		ug/Kg		112	58 - 128	1	27
2-Methylnaphthalene	991	934		ug/Kg		94	65 - 125	4	27
Hexachlorocyclopentadiene	1000	726		ug/Kg		73	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1000		ug/Kg		99	66 - 131	2	60
2,4,5-Trichlorophenol	1010	941		ug/Kg		93	64 - 124	4	60
2-Chloronaphthalene	1000	923		ug/Kg		92	69 - 129	1	25
2-Nitroaniline	983	873		ug/Kg		89	58 - 133	3	60
Dimethyl phthalate	1000	1040		ug/Kg		104	65 - 125	2	60
Acenaphthylene	1000	975		ug/Kg		97	69 - 129	1	28
2,6-Dinitrotoluene	1000	957		ug/Kg		96	65 - 125	6	60
3-Nitroaniline	987	442	*	ug/Kg		45	80 - 165	17	60
Acenaphthene	1000	895		ug/Kg		89	65 - 130	2	27
2,4-Dinitrophenol	5060	3870		ug/Kg		77	53 - 168	4	60
4-Nitrophenol	5030	4640		ug/Kg		92	47 - 172	4	33
Dibenzofuran	1010	929		ug/Kg		92	70 - 125	1	60
2,4-Dinitrotoluene	1000	1020		ug/Kg		102	57 - 122	3	31
Diethyl phthalate	1000	968		ug/Kg		97	64 - 129	3	26
4-Chlorophenyl phenyl ether	992	955		ug/Kg		96	65 - 130	2	60
Fluorene	1010	971		ug/Kg		96	68 - 128	3	31
4-Nitroaniline	991	776		ug/Kg		78	70 - 150	6	60
4,6-Dinitro-2-methylphenol	5060	4770		ug/Kg		94	38 - 143	3	60
N-Nitrosodiphenylamine	1000	1040		ug/Kg		104	88 - 153	3	60
4-Bromophenyl phenyl ether	1000	931		ug/Kg		93	64 - 134	2	60
Hexachlorobenzene	1000	922		ug/Kg		92	61 - 136	0	60
Pentachlorophenol	1000	1030		ug/Kg		102	29 - 124	3	68
Phenanthrene	1000	836		ug/Kg		84	65 - 125	1	28
Anthracene	1010	913		ug/Kg		91	73 - 123	1	27
Di-n-butyl phthalate	1000	958		ug/Kg		96	69 - 124	1	60
Fluoranthene	1000	933		ug/Kg		93	61 - 121	2	36

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

Lab Sample ID: LCSD 580-146384/3-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146384

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene			998	909		ug/Kg		91	54 - 134	1	31
Butyl benzyl phthalate			1000	951		ug/Kg		95	65 - 140	0	60
3,3'-Dichlorobenzidine			1980	1140	*	ug/Kg		57	73 - 163	8	60
Benzo[a]anthracene			1000	896		ug/Kg		89	64 - 124	1	27
Chrysene			992	855		ug/Kg		86	71 - 126	1	26
Bis(2-ethylhexyl) phthalate			1000	983		ug/Kg		98	64 - 144	2	60
Di-n-octyl phthalate			1010	912		ug/Kg		91	58 - 148	1	31
Benzo[a]pyrene			1000	913		ug/Kg		91	68 - 128	2	30
Indeno[1,2,3-cd]pyrene			998	851		ug/Kg		85	59 - 139	2	29
Dibenz(a,h)anthracene			1000	944		ug/Kg		94	57 - 142	1	30
Benzo[g,h,i]perylene			1010	1050		ug/Kg		104	57 - 142	1	28
Carbazole			1010	927		ug/Kg		92	88 - 158	0	60
1-Methylnaphthalene			997	964		ug/Kg		97	48 - 148	2	30
Benzo[b]fluoranthene			1000	984		ug/Kg		98	66 - 136	0	31
Benzo[k]fluoranthene			1010	915		ug/Kg		91	63 - 143	2	31
bis (2-chloroisopropyl) ether			993	730		ug/Kg		73	44 - 140	0	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*97*		*36 - 145*
Phenol-d5	*94*		*38 - 149*
Nitrobenzene-d5	*92*		*38 - 141*
2-Fluorobiphenyl	*83*		*42 - 140*
2,4,6-Tribromophenol	*83*		*28 - 143*
Terphenyl-d14	*93*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A
Matrix: Solid
Analysis Batch: 145848

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*	*09/23/13 14:09*	*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*	*09/23/13 14:09*	*09/26/13 18:50*	*1*

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

Lab Sample ID: LCS 580-145585/2-A
Matrix: Solid
Analysis Batch: 145848

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145585

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A
Matrix: Solid
Analysis Batch: 145848

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145585

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-147082/1-B
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 147132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:36	10/14/13 08:32	1
Barium	ND		0.010		mg/L		10/13/13 12:36	10/14/13 08:32	1
Cadmium	ND		0.010		mg/L		10/13/13 12:36	10/14/13 08:32	1
Chromium	ND		0.025		mg/L		10/13/13 12:36	10/14/13 08:32	1
Lead	ND		0.030		mg/L		10/13/13 12:36	10/14/13 08:32	1
Selenium	ND		0.10		mg/L		10/13/13 12:36	10/14/13 08:32	1
Silver	ND		0.050		mg/L		10/13/13 12:36	10/14/13 08:32	1

Lab Sample ID: LCS 580-147082/2-B
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 147132

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			4.00	3.82		mg/L		96	80 - 120		
Barium			4.00	3.71		mg/L		93	80 - 120		
Cadmium			0.100	0.0928		mg/L		93	80 - 120		
Chromium			0.400	0.361		mg/L		90	80 - 120		
Lead			1.00	0.927		mg/L		93	80 - 120		
Selenium			4.00	3.98		mg/L		100	80 - 120		
Silver			0.600	0.552		mg/L		92	80 - 120		

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

Lab Sample ID: LCSD 580-147082/3-B
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP
Prep Batch: 147132

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	3.95		mg/L		99	80 - 120	3	20
Barium	4.00	3.78		mg/L		94	80 - 120	2	20
Cadmium	0.100	0.0969		mg/L		97	80 - 120	4	20
Chromium	0.400	0.379		mg/L		95	80 - 120	5	20
Lead	1.00	0.971		mg/L		97	80 - 120	5	20
Selenium	4.00	4.14		mg/L		103	80 - 120	4	20
Silver	0.600	0.567		mg/L		94	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-147133/14-A
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:08	1

Lab Sample ID: LCS 580-147133/15-A
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0200	0.0231		mg/L		115	80 - 120

Lab Sample ID: LCSD 580-147133/16-A
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147133

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0200	0.0232		mg/L		116	80 - 120	0	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40428-1

Client Sample ID: DS-SP2-092013

Lab Sample ID: 580-40428-1

Date Collected: 09/20/13 12:55
Matrix: Solid
Date Received: 09/21/13 10:30
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			145824	09/23/13 18:22	MMH	TAL SEA
Total/NA	Analysis	8260B		1	145776	09/25/13 20:08	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145913	09/26/13 14:29	JJP	TAL SEA

Client Sample ID: DS-SP1-092013

Lab Sample ID: 580-40428-2

Date Collected: 09/20/13 12:57
Matrix: Solid
Date Received: 09/21/13 10:30
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		5	146440	10/03/13 15:41	EKK	TAL SEA
Total/NA	Prep	3550B			145585	09/23/13 14:14	WW1	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 21:58	SGH	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:42	FCW	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:36	PAB	TAL SEA
TCLP	Analysis	6010B		1	147176	10/14/13 09:26	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145913	09/26/13 14:29	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

TestAmerica Job ID: 580-40428-1

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: 580-40428-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40428-1	DS-SP2-092013	Solid	09/20/13 12:55	09/21/13 10:30
580-40428-2	DS-SP1-092013	Solid	09/20/13 12:57	09/21/13 10:30

BNSF RAILWAY

CHAIN OF CUSTODY

LAB WORK ORDER: 40428

LABORATORY INFORMATION

Laboratory: TEST AMERICA
Project Manager:
Address: 5755 8 TH STREET EAST
Phone:
City/State/ZIP: TACOMA, WA 98424
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 1390110.04
Project State of Origin: WA
BNSF Project Name: PARKWATER
Project City: SPOKANE
BNSF Contact: BRUCE SHEPPARD
BNSF Work Order No.: T0109-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Project Number: 1390110.04
Project Manager: HOWARD YOUNG
Address: 32001 32ND AVE S, SUITE 100
Email: howardyoung@kennedyjenks.com
City/State/ZIP: FEDERAL WAY WA 98001
Phone: 253-835-6400
Fax: 253-952-3435

TURNAROUND TIME

- ☐ 1-day Rush
- ☐ 2-day Rush
- ☐ 3-day Rush
- ☐ 5- to 8-day Rush
- ☒ Standard 10-Day
- ☒ Other ______

DELIVERABLES

- ☒ BNSF Standard (Level II)
- ☐ Level III
- ☐ Level IV
- ☒ Other Deliverables? K/J Custom EDD
- ☒ EDD Req, Format? EIM

SAMPLE INFORMATION

	Sample Identification	Containers	Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS (SW1311/6010)	SEMI VOLATILE ORGANICS (8270)	PCBs (SW8082)	VOLATILE ORGANIC COMPOUND (8260)	COMMENTS	LAB USE
1	DS-SP2-092013	1	9/20/13	12:55	HY	NA	G	S				X		1
2	DS-SP1-092013	2	9/20/13	12:57	HY	NA	C	S	X	X	X			2
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

Cooler/TB A1 Dig/IR cor 4.7 unc 4.7
Cooler Dsc [illegible] @ Lab
Wet/Packs W/CS. Packing bubble
fedex sat

Cooler/TB B Dig/IR cor 2.7 unc 3.3
Cooler Dsc [illegible] White @ Lab
Wet/Packs W/CS. Packing bubble

580-40428 Chain of Custody

Relinquished By	Date/Time	Received By	Date/Time
[signature]	9/20/13 15:30	[signature]	9/20/13 1930
[signature]	9/20/13 1500	[signature]	9/21/13 1030

Received by Laboratory:
Date/Time:
Lab Remarks:
Lab: Custody Intact? ☐ Yes ☐ No

Comments and Special Analytical Requirements:

Custody Seal No.:
BNSF COC No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
DUPLICATE - CONSULTANT
TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40428-1

Login Number: 40428

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.	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: 580-40425-1
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:
10/1/2013 2:13:19 PM

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

Table of Contents

Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Job ID: 580-40425-1

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 2.7º C and 4.7º C.

The following samples to be analyzed by method 8260 were received and analyzed from an unpreserved bulk soil jar: SP-A7A2-092013 (580-40425-1).

GC/MS VOA - Method(s) 8260B
The following sample(s) was prepared outside of preparation holding time: SP-A7A2-092013 (580-40425-1): they were received as bulk soil more than 48 hours after sampling.

The RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 145776 recovered outside control limits for the following analytes: Benzene. The individual recoveries met the acceptance limit. No further action was taken on this outlier.

GC/MS Semi VOA - Method(s) 8270C
The recovery of the LCS and LCSD is outside of recovery limits for several compounds. The samples will be re-extracted and re-analysed. The data from the original extraction has been qualified and reported.

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.

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Client Sample ID: SP-A7A2-092013
Date Collected: 09/20/13 09:53
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40425-1
Matrix: Solid
Percent Solids: 88.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,1,1-Trichloroethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼		09/25/13 19:25	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼		09/25/13 19:25	1
1,1-Dichloroethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼		09/25/13 19:25	1
1,1-Dichloropropene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,2,3-Trichlorobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,2,3-Trichloropropane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,2,4-Trichlorobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,2,4-Trimethylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼		09/25/13 19:25	1
1,2-Dichlorobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,2-Dichloroethane	ND	H	17		ug/Kg	☼		09/25/13 19:25	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼		09/25/13 19:25	1
1,3,5-Trimethylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,3-Dichlorobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,3-Dichloropropane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
1,4-Dichlorobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
2,2-Dichloropropane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
2-Chlorotoluene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
4-Chlorotoluene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
4-Isopropyltoluene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Acetone	ND	H	430		ug/Kg	☼		09/25/13 19:25	1
Benzene	ND	H *	17		ug/Kg	☼		09/25/13 19:25	1
Bromobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Bromoform	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Bromomethane	ND	H	150		ug/Kg	☼		09/25/13 19:25	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼		09/25/13 19:25	1
Chlorobenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Chlorobromomethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼		09/25/13 19:25	1
Chloroethane	ND	H	430		ug/Kg	☼		09/25/13 19:25	1
Chloroform	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Chloromethane	ND	H	430		ug/Kg	☼		09/25/13 19:25	1
cis-1,2-Dichloroethene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
cis-1,3-Dichloropropene	ND	H	17		ug/Kg	☼		09/25/13 19:25	1
Dibromomethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Dichlorobromomethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Dichlorodifluoromethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Ethylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Ethylene Dibromide	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Hexachlorobutadiene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Isopropylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Methyl tert-butyl ether	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Methylene Chloride	ND	H	17		ug/Kg	☼		09/25/13 19:25	1
m-Xylene & p-Xylene	**82**	**H**	43		ug/Kg	☼		09/25/13 19:25	1
Naphthalene	**53**	**H**	43		ug/Kg	☼		09/25/13 19:25	1
n-Butylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Client Sample ID: SP-A7A2-092013
Date Collected: 09/20/13 09:53
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40425-1
Matrix: Solid
Percent Solids: 88.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
o-Xylene	**44**	**H**	43		ug/Kg	☼		09/25/13 19:25	1
sec-Butylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Styrene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
tert-Butylbenzene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Tetrachloroethene	ND	H	22		ug/Kg	☼		09/25/13 19:25	1
Toluene	**76**	**H**	43		ug/Kg	☼		09/25/13 19:25	1
trans-1,2-Dichloroethene	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
trans-1,3-Dichloropropene	ND	H	17		ug/Kg	☼		09/25/13 19:25	1
Trichloroethene	ND	H	17		ug/Kg	☼		09/25/13 19:25	1
Trichlorofluoromethane	ND	H	43		ug/Kg	☼		09/25/13 19:25	1
Vinyl chloride	ND	H	8.7		ug/Kg	☼		09/25/13 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 120*		*09/25/13 19:25*	*1*
Ethylbenzene-d10	*99*		*70 - 120*		*09/25/13 19:25*	*1*
Fluorobenzene (Surr)	*94*		*80 - 120*		*09/25/13 19:25*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/25/13 19:25*	*1*
Trifluorotoluene (Surr)	*98*		*65 - 140*		*09/25/13 19:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**89**		0.10		%			09/25/13 11:40	1
Percent Moisture	**11**		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Client Sample ID: SP-A7A1-092013
Date Collected: 09/20/13 09:53
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40425-2
Matrix: Solid
Percent Solids: 91.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		110		ug/Kg	☼		09/29/13 06:42	1
Bis(2-chloroethyl)ether	ND		110		ug/Kg	☼		09/29/13 06:42	1
2-Chlorophenol	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
1,3-Dichlorobenzene	ND		53		ug/Kg	☼		09/29/13 06:42	1
1,4-Dichlorobenzene	ND		53		ug/Kg	☼		09/29/13 06:42	1
Benzyl alcohol	ND		110		ug/Kg	☼		09/29/13 06:42	1
1,2-Dichlorobenzene	ND		58		ug/Kg	☼		09/29/13 06:42	1
2-Methylphenol	ND		110		ug/Kg	☼		09/29/13 06:42	1
3 & 4 Methylphenol	ND		210		ug/Kg	☼		09/29/13 06:42	1
N-Nitrosodi-n-propylamine	ND		110		ug/Kg	☼		09/29/13 06:42	1
Hexachloroethane	ND		110		ug/Kg	☼		09/29/13 06:42	1
Nitrobenzene	ND		110		ug/Kg	☼		09/29/13 06:42	1
Isophorone	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
2-Nitrophenol	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
2,4-Dimethylphenol	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
Benzoic acid	ND		2600		ug/Kg	☼		09/29/13 06:42	1
Bis(2-chloroethoxy)methane	ND		110		ug/Kg	☼		09/29/13 06:42	1
2,4-Dichlorophenol	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
1,2,4-Trichlorobenzene	ND		53		ug/Kg	☼		09/29/13 06:42	1
Naphthalene	**160**		21		ug/Kg	☼		09/29/13 06:42	1
4-Chloroaniline	ND		110		ug/Kg	☼		09/29/13 06:42	1
Hexachlorobutadiene	ND		53		ug/Kg	☼		09/29/13 06:42	1
4-Chloro-3-methylphenol	ND		110		ug/Kg	☼		09/29/13 06:42	1
2-Methylnaphthalene	**170**		21		ug/Kg	☼		09/29/13 06:42	1
Hexachlorocyclopentadiene	ND		110		ug/Kg	☼		09/29/13 06:42	1
2,4,6-Trichlorophenol	ND		160		ug/Kg	☼		09/29/13 06:42	1
2,4,5-Trichlorophenol	ND		110		ug/Kg	☼		09/29/13 06:42	1
2-Chloronaphthalene	ND		21		ug/Kg	☼		09/29/13 06:42	1
2-Nitroaniline	ND		110		ug/Kg	☼		09/29/13 06:42	1
Dimethyl phthalate	ND		110		ug/Kg	☼		09/29/13 06:42	1
Acenaphthylene	**94**		21		ug/Kg	☼		09/29/13 06:42	1
2,6-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 06:42	1
3-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
Acenaphthene	**200**		21		ug/Kg	☼		09/29/13 06:42	1
2,4-Dinitrophenol	ND		1100		ug/Kg	☼		09/29/13 06:42	1
4-Nitrophenol	ND		1100		ug/Kg	☼		09/29/13 06:42	1
Dibenzofuran	**120**		110		ug/Kg	☼		09/29/13 06:42	1
2,4-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 06:42	1
Diethyl phthalate	ND		210		ug/Kg	☼		09/29/13 06:42	1
4-Chlorophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 06:42	1
Fluorene	**140**		21		ug/Kg	☼		09/29/13 06:42	1
4-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 06:42	1
4,6-Dinitro-2-methylphenol	ND		1100		ug/Kg	☼		09/29/13 06:42	1
N-Nitrosodiphenylamine	ND		53		ug/Kg	☼		09/29/13 06:42	1
4-Bromophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 06:42	1
Hexachlorobenzene	ND		53		ug/Kg	☼		09/29/13 06:42	1
Pentachlorophenol	**230**		210		ug/Kg	☼		09/29/13 06:42	1
Phenanthrene	**1700**		21		ug/Kg	☼		09/29/13 06:42	1
Anthracene	**480**		21		ug/Kg	☼		09/29/13 06:42	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Client Sample ID: SP-A7A1-092013
Date Collected: 09/20/13 09:53
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40425-2
Matrix: Solid
Percent Solids: 91.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		530		ug/Kg	☼		09/29/13 06:42	1
Fluoranthene	**3500**		21		ug/Kg	☼		09/29/13 06:42	1
Pyrene	**3300**		21		ug/Kg	☼		09/29/13 06:42	1
Butyl benzyl phthalate	ND		210		ug/Kg	☼		09/29/13 06:42	1
3,3'-Dichlorobenzidine	ND	*	210		ug/Kg	☼		09/29/13 06:42	1
Benzo[a]anthracene	**2200**		21		ug/Kg	☼		09/29/13 06:42	1
Chrysene	**2300**		26		ug/Kg	☼		09/29/13 06:42	1
Bis(2-ethylhexyl) phthalate	ND		640		ug/Kg	☼		09/29/13 06:42	1
Di-n-octyl phthalate	ND		530		ug/Kg	☼		09/29/13 06:42	1
Benzo[a]pyrene	**2700**		32		ug/Kg	☼		09/29/13 06:42	1
Indeno[1,2,3-cd]pyrene	**980**		42		ug/Kg	☼		09/29/13 06:42	1
Dibenz(a,h)anthracene	**240**		42		ug/Kg	☼		09/29/13 06:42	1
Benzo[g,h,i]perylene	**920**		26		ug/Kg	☼		09/29/13 06:42	1
Carbazole	**300**		110		ug/Kg	☼		09/29/13 06:42	1
1-Methylnaphthalene	**120**		32		ug/Kg	☼		09/29/13 06:42	1
Benzo[b]fluoranthene	**4400**		21		ug/Kg	☼		09/29/13 06:42	1
Benzo[k]fluoranthene	**1700**		26		ug/Kg	☼		09/29/13 06:42	1
bis (2-chloroisopropyl) ether	ND		260		ug/Kg	☼		09/29/13 06:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*95*		*36 - 145*		*09/29/13 06:42*	*1*
Phenol-d5	*92*		*38 - 149*		*09/29/13 06:42*	*1*
Nitrobenzene-d5	*98*		*38 - 141*		*09/29/13 06:42*	*1*
2-Fluorobiphenyl	*82*		*42 - 140*		*09/29/13 06:42*	*1*
2,4,6-Tribromophenol	*86*		*28 - 143*		*09/29/13 06:42*	*1*
Terphenyl-d14	*102*		*42 - 151*		*09/29/13 06:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼		09/26/13 21:01	1
PCB-1221	ND		0.012		mg/Kg	☼		09/26/13 21:01	1
PCB-1232	ND		0.012		mg/Kg	☼		09/26/13 21:01	1
PCB-1242	ND		0.011		mg/Kg	☼		09/26/13 21:01	1
PCB-1248	ND		0.011		mg/Kg	☼		09/26/13 21:01	1
PCB-1254	ND		0.011		mg/Kg	☼		09/26/13 21:01	1
PCB-1260	**0.060**		0.011		mg/Kg	☼		09/26/13 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*45 - 135*		*09/26/13 21:01*	*1*
DCB Decachlorobiphenyl	*91*		*50 - 140*		*09/26/13 21:01*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 11:07	1
Barium	**0.52**		0.010		mg/L			09/30/13 11:07	1
Cadmium	**0.066**		0.010		mg/L			09/30/13 11:07	1
Chromium	ND		0.025		mg/L			09/30/13 11:07	1
Lead	**0.30**		0.030		mg/L			09/30/13 11:07	1
Selenium	ND		0.10		mg/L			09/30/13 11:07	1
Silver	ND		0.050		mg/L			09/30/13 11:07	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Client Sample ID: SP-A7A1-092013
Date Collected: 09/20/13 09:53
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40425-2
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/25/13 11:40	1
Percent Moisture	8.8		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,1-Trichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg			09/25/13 12:19	1
1,1,2-Trichloroethane	ND		12		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethene	ND		20		ug/Kg			09/25/13 12:19	1
1,1-Dichloropropene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg			09/25/13 12:19	1
1,2-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dichloroethane	ND		16		ug/Kg			09/25/13 12:19	1
1,2-Dichloropropane	ND		12		ug/Kg			09/25/13 12:19	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,4-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
2,2-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
2-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Isopropyltoluene	ND		40		ug/Kg			09/25/13 12:19	1
Acetone	ND		400		ug/Kg			09/25/13 12:19	1
Benzene	ND		16		ug/Kg			09/25/13 12:19	1
Bromobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Bromoform	ND		40		ug/Kg			09/25/13 12:19	1
Bromomethane	ND		140		ug/Kg			09/25/13 12:19	1
Carbon tetrachloride	ND		20		ug/Kg			09/25/13 12:19	1
Chlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Chlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Chlorodibromomethane	ND		20		ug/Kg			09/25/13 12:19	1
Chloroethane	ND		400		ug/Kg			09/25/13 12:19	1
Chloroform	ND		40		ug/Kg			09/25/13 12:19	1
Chloromethane	ND		400		ug/Kg			09/25/13 12:19	1
cis-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
cis-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Dibromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorodifluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Ethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Ethylene Dibromide	ND		40		ug/Kg			09/25/13 12:19	1
Hexachlorobutadiene	ND		40		ug/Kg			09/25/13 12:19	1
Isopropylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Methyl tert-butyl ether	ND		40		ug/Kg			09/25/13 12:19	1
Methylene Chloride	ND		16		ug/Kg			09/25/13 12:19	1
m-Xylene & p-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
Naphthalene	ND		40		ug/Kg			09/25/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
N-Propylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
o-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
sec-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Styrene	ND		40		ug/Kg			09/25/13 12:19	1
tert-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Tetrachloroethene	ND		20		ug/Kg			09/25/13 12:19	1
Toluene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Trichloroethene	ND		16		ug/Kg			09/25/13 12:19	1
Trichlorofluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Vinyl chloride	ND		8.0		ug/Kg			09/25/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 120*		*09/25/13 12:19*	*1*
Ethylbenzene-d10	*116*		*70 - 120*		*09/25/13 12:19*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*		*09/25/13 12:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/25/13 12:19*	*1*
Trifluorotoluene (Surr)	*102*		*65 - 140*		*09/25/13 12:19*	*1*

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	651		ug/Kg		81	72 - 123
1,1,1-Trichloroethane	800	700		ug/Kg		87	63 - 135
1,1,2,2-Tetrachloroethane	800	755		ug/Kg		94	73 - 125
1,1,2-Trichloroethane	800	772		ug/Kg		96	77 - 124
1,1-Dichloroethane	800	766		ug/Kg		96	70 - 128
1,1-Dichloroethene	800	764		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 123
1,2,3-Trichlorobenzene	800	521		ug/Kg		65	61 - 130
1,2,3-Trichloropropane	800	803		ug/Kg		100	77 - 123
1,2,4-Trichlorobenzene	800	589		ug/Kg		74	61 - 130
1,2,4-Trimethylbenzene	800	762		ug/Kg		95	79 - 124
1,2-Dibromo-3-Chloropropane	800	424		ug/Kg		53	53 - 132
1,2-Dichlorobenzene	800	756		ug/Kg		94	79 - 117
1,2-Dichloroethane	800	674		ug/Kg		84	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	754		ug/Kg		94	80 - 125
1,3-Dichlorobenzene	800	758		ug/Kg		95	79 - 119
1,3-Dichloropropane	800	786		ug/Kg		98	77 - 123
1,4-Dichlorobenzene	800	745		ug/Kg		93	79 - 117
2,2-Dichloropropane	800	711		ug/Kg		89	56 - 144
2-Chlorotoluene	800	778		ug/Kg		97	79 - 122
4-Chlorotoluene	800	821		ug/Kg		103	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	731		ug/Kg		91	78 - 126
Acetone	3200	2340		ug/Kg		73	20 - 160
Benzene	800	971		ug/Kg		121	70 - 128
Bromobenzene	800	793		ug/Kg		99	80 - 120
Bromoform	800	491		ug/Kg		61	50 - 124
Bromomethane	800	950		ug/Kg		119	57 - 148
Carbon tetrachloride	800	693		ug/Kg		87	59 - 145
Chlorobenzene	800	809		ug/Kg		101	75 - 120
Chlorobromomethane	800	741		ug/Kg		93	78 - 123
Chlorodibromomethane	800	609		ug/Kg		76	69 - 129
Chloroethane	800	839		ug/Kg		105	48 - 167
Chloroform	800	775		ug/Kg		97	78 - 125
Chloromethane	800	696		ug/Kg		87	55 - 136
cis-1,2-Dichloroethene	800	772		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	800	693		ug/Kg		87	69 - 129
Dibromomethane	800	793		ug/Kg		99	78 - 126
Dichlorobromomethane	800	580		ug/Kg		73	58 - 133
Dichlorodifluoromethane	800	700		ug/Kg		88	38 - 150
Ethylbenzene	800	814		ug/Kg		102	78 - 126
Ethylene Dibromide	800	803		ug/Kg		100	69 - 126
Hexachlorobutadiene	800	723		ug/Kg		90	68 - 134
Isopropylbenzene	800	804		ug/Kg		100	79 - 127
Methyl tert-butyl ether	800	690		ug/Kg		86	65 - 125
Methylene Chloride	800	770		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	829		ug/Kg		104	78 - 126
Naphthalene	800	577		ug/Kg		72	14 - 170
n-Butylbenzene	800	659		ug/Kg		82	78 - 128
N-Propylbenzene	800	772		ug/Kg		96	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	722		ug/Kg		90	78 - 128
Styrene	800	850		ug/Kg		106	79 - 127
tert-Butylbenzene	800	764		ug/Kg		95	71 - 136
Tetrachloroethene	800	840		ug/Kg		105	56 - 150
Toluene	800	817		ug/Kg		102	75 - 126
trans-1,2-Dichloroethene	800	768		ug/Kg		96	76 - 131
trans-1,3-Dichloropropene	800	664		ug/Kg		83	72 - 129
Trichloroethene	800	807		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	701		ug/Kg		88	47 - 165
Vinyl chloride	800	741		ug/Kg		93	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*99*		*70 - 120*
Fluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	800	667		ug/Kg		83	72 - 123	2	20
1,1,1-Trichloroethane	800	715		ug/Kg		89	63 - 135	2	20
1,1,2,2-Tetrachloroethane	800	783		ug/Kg		98	73 - 125	4	22
1,1,2-Trichloroethane	800	780		ug/Kg		97	77 - 124	1	18
1,1-Dichloroethane	800	800		ug/Kg		100	70 - 128	4	21
1,1-Dichloroethene	800	744		ug/Kg		93	70 - 133	3	23
1,1-Dichloropropene	800	815		ug/Kg		102	77 - 123	0	16
1,2,3-Trichlorobenzene	800	544		ug/Kg		68	61 - 130	4	23
1,2,3-Trichloropropane	800	807		ug/Kg		101	77 - 123	1	23
1,2,4-Trichlorobenzene	800	618		ug/Kg		77	61 - 130	5	22
1,2,4-Trimethylbenzene	800	761		ug/Kg		95	79 - 124	0	18
1,2-Dibromo-3-Chloropropane	800	465		ug/Kg		58	53 - 132	9	27
1,2-Dichlorobenzene	800	743		ug/Kg		93	79 - 117	2	17
1,2-Dichloroethane	800	758		ug/Kg		95	71 - 128	12	18
1,2-Dichloropropane	800	1010		ug/Kg		126	76 - 161	4	15
1,3,5-Trimethylbenzene	800	759		ug/Kg		95	80 - 125	1	18
1,3-Dichlorobenzene	800	759		ug/Kg		95	79 - 119	0	17
1,3-Dichloropropane	800	808		ug/Kg		101	77 - 123	3	19
1,4-Dichlorobenzene	800	747		ug/Kg		93	79 - 117	0	18
2,2-Dichloropropane	800	717		ug/Kg		90	56 - 144	1	21
2-Chlorotoluene	800	808		ug/Kg		101	79 - 122	4	18
4-Chlorotoluene	800	786		ug/Kg		98	80 - 122	4	18
4-Isopropyltoluene	800	711		ug/Kg		89	78 - 126	3	18
Acetone	3200	2660		ug/Kg		83	20 - 160	13	30
Benzene	800	783	*	ug/Kg		98	70 - 128	21	19
Bromobenzene	800	815		ug/Kg		102	80 - 120	3	19
Bromoform	800	525		ug/Kg		66	50 - 124	7	25
Bromomethane	800	958		ug/Kg		120	57 - 148	1	29
Carbon tetrachloride	800	723		ug/Kg		90	59 - 145	4	19
Chlorobenzene	800	809		ug/Kg		101	75 - 120	0	21
Chlorobromomethane	800	814		ug/Kg		102	78 - 123	9	19
Chlorodibromomethane	800	616		ug/Kg		77	69 - 129	1	23
Chloroethane	800	931		ug/Kg		116	48 - 167	10	53
Chloroform	800	788		ug/Kg		98	78 - 125	2	17
Chloromethane	800	751		ug/Kg		94	55 - 136	8	26
cis-1,2-Dichloroethene	800	797		ug/Kg		100	70 - 130	3	19
cis-1,3-Dichloropropene	800	677		ug/Kg		85	69 - 129	2	19
Dibromomethane	800	788		ug/Kg		98	78 - 126	1	18
Dichlorobromomethane	800	587		ug/Kg		73	58 - 133	1	19
Dichlorodifluoromethane	800	729		ug/Kg		91	38 - 150	4	26
Ethylbenzene	800	823		ug/Kg		103	78 - 126	1	23
Ethylene Dibromide	800	838		ug/Kg		105	69 - 126	4	21
Hexachlorobutadiene	800	698		ug/Kg		87	68 - 134	4	21
Isopropylbenzene	800	783		ug/Kg		98	79 - 127	3	20
Methyl tert-butyl ether	800	744		ug/Kg		93	65 - 125	8	30
Methylene Chloride	800	773		ug/Kg		97	57 - 146	0	21
m-Xylene & p-Xylene	800	838		ug/Kg		105	78 - 126	1	23
Naphthalene	800	632		ug/Kg		79	14 - 170	9	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			800	659		ug/Kg		82	78 - 128	0	17
N-Propylbenzene			800	764		ug/Kg		95	81 - 127	1	20
o-Xylene			800	800		ug/Kg		100	77 - 127	0	22
sec-Butylbenzene			800	724		ug/Kg		90	78 - 128	0	17
Styrene			800	846		ug/Kg		106	79 - 127	1	21
tert-Butylbenzene			800	755		ug/Kg		94	71 - 136	1	27
Tetrachloroethene			800	815		ug/Kg		102	56 - 150	3	27
Toluene			800	807		ug/Kg		101	75 - 126	1	19
trans-1,2-Dichloroethene			800	789		ug/Kg		99	76 - 131	3	18
trans-1,3-Dichloropropene			800	683		ug/Kg		85	72 - 129	3	20
Trichloroethene			800	811		ug/Kg		101	83 - 124	0	17
Trichlorofluoromethane			800	690		ug/Kg		86	47 - 165	2	54
Vinyl chloride			800	754		ug/Kg		94	67 - 131	2	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*
Ethylbenzene-d10	*100*		*70 - 120*
Fluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*65 - 140*

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg			09/29/13 01:03	1
2-Chlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,3-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
1,4-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Benzyl alcohol	ND		100		ug/Kg			09/29/13 01:03	1
1,2-Dichlorobenzene	ND		55		ug/Kg			09/29/13 01:03	1
2-Methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
3 & 4 Methylphenol	ND		200		ug/Kg			09/29/13 01:03	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg			09/29/13 01:03	1
Hexachloroethane	ND		100		ug/Kg			09/29/13 01:03	1
Nitrobenzene	ND		100		ug/Kg			09/29/13 01:03	1
Isophorone	ND		100		ug/Kg			09/29/13 01:03	1
2-Nitrophenol	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dimethylphenol	ND		100		ug/Kg			09/29/13 01:03	1
Benzoic acid	ND		2500		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Naphthalene	ND		20		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobutadiene	ND		50		ug/Kg			09/29/13 01:03	1
4-Chloro-3-methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Methylnaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
Hexachlorocyclopentadiene	ND		100		ug/Kg			09/29/13 01:03	1
2,4,6-Trichlorophenol	ND		150		ug/Kg			09/29/13 01:03	1
2,4,5-Trichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Chloronaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
2-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Dimethyl phthalate	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthylene	ND		20		ug/Kg			09/29/13 01:03	1
2,6-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
3-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthene	ND		20		ug/Kg			09/29/13 01:03	1
2,4-Dinitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
4-Nitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
Dibenzofuran	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
Diethyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Fluorene	ND		20		ug/Kg			09/29/13 01:03	1
4-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg			09/29/13 01:03	1
N-Nitrosodiphenylamine	ND		50		ug/Kg			09/29/13 01:03	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Pentachlorophenol	ND		200		ug/Kg			09/29/13 01:03	1
Phenanthrene	ND		20		ug/Kg			09/29/13 01:03	1
Anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Di-n-butyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Pyrene	ND		20		ug/Kg			09/29/13 01:03	1
Butyl benzyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg			09/29/13 01:03	1
Benzo[a]anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Chrysene	ND		25		ug/Kg			09/29/13 01:03	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg			09/29/13 01:03	1
Di-n-octyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Benzo[a]pyrene	ND		30		ug/Kg			09/29/13 01:03	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg			09/29/13 01:03	1
Dibenz(a,h)anthracene	ND		40		ug/Kg			09/29/13 01:03	1
Benzo[g,h,i]perylene	ND		25		ug/Kg			09/29/13 01:03	1
Carbazole	ND		100		ug/Kg			09/29/13 01:03	1
1-Methylnaphthalene	ND		30		ug/Kg			09/29/13 01:03	1
Benzo[b]fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Benzo[k]fluoranthene	ND		25		ug/Kg			09/29/13 01:03	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		36 - 145		09/29/13 01:03	1
Phenol-d5	106		38 - 149		09/29/13 01:03	1
Nitrobenzene-d5	102		38 - 141		09/29/13 01:03	1
2-Fluorobiphenyl	96		42 - 140		09/29/13 01:03	1
2,4,6-Tribromophenol	72		28 - 143		09/29/13 01:03	1
Terphenyl-d14	113		42 - 151		09/29/13 01:03	1

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1240		ug/Kg		124	66 - 126
Bis(2-chloroethyl)ether	998	970		ug/Kg		97	57 - 122
2-Chlorophenol	1000	1280	*	ug/Kg		128	65 - 125
1,3-Dichlorobenzene	1000	1020		ug/Kg		102	64 - 124
1,4-Dichlorobenzene	1010	1030		ug/Kg		102	62 - 132
Benzyl alcohol	997	1080		ug/Kg		108	42 - 147
1,2-Dichlorobenzene	1010	1000		ug/Kg		99	68 - 118
2-Methylphenol	997	1030		ug/Kg		103	56 - 121
3 & 4 Methylphenol	1000	1110		ug/Kg		111	61 - 126
N-Nitrosodi-n-propylamine	1000	995		ug/Kg		99	52 - 127
Hexachloroethane	1010	1040		ug/Kg		102	56 - 131
Nitrobenzene	1020	1110		ug/Kg		109	59 - 134
Isophorone	988	1190	*	ug/Kg		121	53 - 118
2-Nitrophenol	1010	1320	*	ug/Kg		131	58 - 128
2,4-Dimethylphenol	1010	1540	*	ug/Kg		153	58 - 133
Benzoic acid	5090	5490		ug/Kg		108	10 - 130
Bis(2-chloroethoxy)methane	998	1030		ug/Kg		103	63 - 128
2,4-Dichlorophenol	1020	1330	*	ug/Kg		131	59 - 124
1,2,4-Trichlorobenzene	1000	1010		ug/Kg		101	63 - 128
Naphthalene	1010	991		ug/Kg		98	64 - 129
4-Chloroaniline	983	627		ug/Kg		64	20 - 181
Hexachlorobutadiene	1000	1010		ug/Kg		101	59 - 134
4-Chloro-3-methylphenol	1010	1210		ug/Kg		120	58 - 128
2-Methylnaphthalene	991	1010		ug/Kg		102	65 - 125
Hexachlorocyclopentadiene	1000	797		ug/Kg		80	30 - 132
2,4,6-Trichlorophenol	1010	1120		ug/Kg		111	66 - 131
2,4,5-Trichlorophenol	1010	1050		ug/Kg		104	64 - 124
2-Chloronaphthalene	1000	1010		ug/Kg		101	69 - 129
2-Nitroaniline	983	897		ug/Kg		91	58 - 133
Dimethyl phthalate	1000	1130		ug/Kg		112	65 - 125
Acenaphthylene	1000	1090		ug/Kg		109	69 - 129
2,6-Dinitrotoluene	1000	993		ug/Kg		99	65 - 125
3-Nitroaniline	987	524	*	ug/Kg		53	80 - 165
Acenaphthene	1000	974		ug/Kg		97	65 - 130
2,4-Dinitrophenol	5060	4260		ug/Kg		84	53 - 168
4-Nitrophenol	5030	4670		ug/Kg		93	47 - 172

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

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	1010	1000		ug/Kg		100	70 - 125
2,4-Dinitrotoluene	1000	1050		ug/Kg		105	57 - 122
Diethyl phthalate	1000	1040		ug/Kg		104	64 - 129
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130
Fluorene	1010	1050		ug/Kg		104	68 - 128
4-Nitroaniline	991	686	*	ug/Kg		69	70 - 150
4,6-Dinitro-2-methylphenol	5060	5330		ug/Kg		105	38 - 143
N-Nitrosodiphenylamine	1000	1180		ug/Kg		118	88 - 153
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134
Hexachlorobenzene	1000	1030		ug/Kg		103	61 - 136
Pentachlorophenol	1000	1140		ug/Kg		114	29 - 124
Phenanthrene	1000	962		ug/Kg		96	65 - 125
Anthracene	1010	1030		ug/Kg		102	73 - 123
Di-n-butyl phthalate	1000	1060		ug/Kg		106	69 - 124
Fluoranthene	1000	1070		ug/Kg		107	61 - 121
Pyrene	998	1030		ug/Kg		103	54 - 134
Butyl benzyl phthalate	1000	1080		ug/Kg		107	65 - 140
3,3'-Dichlorobenzidine	1980	1420	*	ug/Kg		71	73 - 163
Benzo[a]anthracene	1000	1020		ug/Kg		102	64 - 124
Chrysene	992	962		ug/Kg		97	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1100		ug/Kg		110	64 - 144
Di-n-octyl phthalate	1010	986		ug/Kg		98	58 - 148
Benzo[a]pyrene	1000	1040		ug/Kg		104	68 - 128
Indeno[1,2,3-cd]pyrene	998	879		ug/Kg		88	59 - 139
Dibenz(a,h)anthracene	1000	992		ug/Kg		99	57 - 142
Benzo[g,h,i]perylene	1010	1080		ug/Kg		107	57 - 142
Carbazole	1010	1060		ug/Kg		105	88 - 158
1-Methylnaphthalene	997	1040		ug/Kg		105	48 - 148
Benzo[b]fluoranthene	1000	1100		ug/Kg		110	66 - 136
Benzo[k]fluoranthene	1010	1060		ug/Kg		105	63 - 143
bis (2-chloroisopropyl) ether	993	815		ug/Kg		82	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*113*		*36 - 145*
Phenol-d5	*108*		*38 - 149*
Nitrobenzene-d5	*104*		*38 - 141*
2-Fluorobiphenyl	*97*		*42 - 140*
2,4,6-Tribromophenol	*99*		*28 - 143*
Terphenyl-d14	*110*		*42 - 151*

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1200		ug/Kg		120	66 - 126	3	26
Bis(2-chloroethyl)ether	998	943		ug/Kg		95	57 - 122	3	60
2-Chlorophenol	1000	1220		ug/Kg		121	65 - 125	5	27

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1000	996		ug/Kg		99	64 - 124	2	60
1,4-Dichlorobenzene	1010	1010		ug/Kg		99	62 - 132	3	32
Benzyl alcohol	997	1040		ug/Kg		104	42 - 147	4	60
1,2-Dichlorobenzene	1010	978		ug/Kg		97	68 - 118	2	60
2-Methylphenol	997	985		ug/Kg		99	56 - 121	4	25
3 & 4 Methylphenol	1000	1080		ug/Kg		108	61 - 126	3	27
N-Nitrosodi-n-propylamine	1000	984		ug/Kg		98	52 - 127	1	28
Hexachloroethane	1010	963		ug/Kg		95	56 - 131	7	60
Nitrobenzene	1020	1100		ug/Kg		108	59 - 134	1	60
Isophorone	988	1170		ug/Kg		118	53 - 118	2	60
2-Nitrophenol	1010	1290		ug/Kg		128	58 - 128	2	60
2,4-Dimethylphenol	1010	1470	*	ug/Kg		146	58 - 133	5	60
Benzoic acid	5090	5140		ug/Kg		101	10 - 130	7	60
Bis(2-chloroethoxy)methane	998	996		ug/Kg		100	63 - 128	3	60
2,4-Dichlorophenol	1020	1280	*	ug/Kg		126	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	994		ug/Kg		99	63 - 128	1	28
Naphthalene	1010	971		ug/Kg		96	64 - 129	2	26
4-Chloroaniline	983	553		ug/Kg		56	20 - 181	12	60
Hexachlorobutadiene	1000	999		ug/Kg		100	59 - 134	1	60
4-Chloro-3-methylphenol	1010	1200		ug/Kg		119	58 - 128	1	27
2-Methylnaphthalene	991	966		ug/Kg		97	65 - 125	4	27
Hexachlorocyclopentadiene	1000	802		ug/Kg		80	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1120		ug/Kg		110	66 - 131	0	60
2,4,5-Trichlorophenol	1010	994		ug/Kg		98	64 - 124	6	60
2-Chloronaphthalene	1000	985		ug/Kg		98	69 - 129	2	25
2-Nitroaniline	983	891		ug/Kg		91	58 - 133	1	60
Dimethyl phthalate	1000	1090		ug/Kg		109	65 - 125	3	60
Acenaphthylene	1000	1040		ug/Kg		104	69 - 129	4	28
2,6-Dinitrotoluene	1000	995		ug/Kg		99	65 - 125	0	60
3-Nitroaniline	987	509	*	ug/Kg		52	80 - 165	3	60
Acenaphthene	1000	956		ug/Kg		95	65 - 130	2	27
2,4-Dinitrophenol	5060	4020		ug/Kg		79	53 - 168	6	60
4-Nitrophenol	5030	4730		ug/Kg		94	47 - 172	1	33
Dibenzofuran	1010	1010		ug/Kg		100	70 - 125	1	60
2,4-Dinitrotoluene	1000	1070		ug/Kg		107	57 - 122	2	31
Diethyl phthalate	1000	1030		ug/Kg		103	64 - 129	1	26
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130	0	60
Fluorene	1010	1030		ug/Kg		102	68 - 128	2	31
4-Nitroaniline	991	755		ug/Kg		76	70 - 150	10	60
4,6-Dinitro-2-methylphenol	5060	5130		ug/Kg		101	38 - 143	4	60
N-Nitrosodiphenylamine	1000	1170		ug/Kg		117	88 - 153	0	60
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134	0	60
Hexachlorobenzene	1000	1050		ug/Kg		104	61 - 136	2	60
Pentachlorophenol	1000	1120		ug/Kg		112	29 - 124	2	68
Phenanthrene	1000	951		ug/Kg		95	65 - 125	1	28
Anthracene	1010	1020		ug/Kg		102	73 - 123	0	27
Di-n-butyl phthalate	1000	1050		ug/Kg		105	69 - 124	1	60
Fluoranthene	1000	1070		ug/Kg		107	61 - 121	0	36

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene			998	1010		ug/Kg		102	54 - 134	2	31
Butyl benzyl phthalate			1000	1040		ug/Kg		104	65 - 140	3	60
3,3'-Dichlorobenzidine			1980	1300	*	ug/Kg		66	73 - 163	8	60
Benzo[a]anthracene			1000	987		ug/Kg		98	64 - 124	3	27
Chrysene			992	942		ug/Kg		95	71 - 126	2	26
Bis(2-ethylhexyl) phthalate			1000	1060		ug/Kg		106	64 - 144	4	60
Di-n-octyl phthalate			1010	972		ug/Kg		97	58 - 148	1	31
Benzo[a]pyrene			1000	1000		ug/Kg		100	68 - 128	3	30
Indeno[1,2,3-cd]pyrene			998	823		ug/Kg		82	59 - 139	7	29
Dibenz(a,h)anthracene			1000	902		ug/Kg		90	57 - 142	10	30
Benzo[g,h,i]perylene			1010	1040		ug/Kg		103	57 - 142	4	28
Carbazole			1010	1040		ug/Kg		103	88 - 158	2	60
1-Methylnaphthalene			997	1010		ug/Kg		101	48 - 148	3	30
Benzo[b]fluoranthene			1000	1090		ug/Kg		108	66 - 136	1	31
Benzo[k]fluoranthene			1010	1080		ug/Kg		108	63 - 143	2	31
bis (2-chloroisopropyl) ether			993	759		ug/Kg		76	44 - 140	7	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*104*		*36 - 145*
Phenol-d5	*101*		*38 - 149*
Nitrobenzene-d5	*101*		*38 - 141*
2-Fluorobiphenyl	*93*		*42 - 140*
2,4,6-Tribromophenol	*95*		*28 - 143*
Terphenyl-d14	*105*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg			09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*		*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*		*09/26/13 18:50*	*1*

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

Lab Sample ID: LCS 580-145585/2-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-145876/1-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:19	1
Barium	ND		0.010		mg/L			09/30/13 10:19	1
Cadmium	ND		0.010		mg/L			09/30/13 10:19	1
Chromium	ND		0.025		mg/L			09/30/13 10:19	1
Lead	ND		0.030		mg/L			09/30/13 10:19	1
Selenium	ND		0.10		mg/L			09/30/13 10:19	1
Silver	ND		0.050		mg/L			09/30/13 10:19	1

Lab Sample ID: LCS 580-145876/2-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			4.00	4.19		mg/L		105	80 - 120		
Barium			4.00	3.99		mg/L		100	80 - 120		
Cadmium			0.100	0.103		mg/L		103	80 - 120		
Chromium			0.400	0.401		mg/L		100	80 - 120		
Lead			1.00	0.980		mg/L		98	80 - 120		
Selenium			4.00	4.26		mg/L		107	80 - 120		
Silver			0.600	0.573		mg/L		95	80 - 120		

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

Lab Sample ID: LCSD 580-145876/3-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic			4.00	4.28		mg/L		107	80 - 120	2	20
Barium			4.00	4.01		mg/L		100	80 - 120	1	20
Cadmium			0.100	0.104		mg/L		104	80 - 120	1	20
Chromium			0.400	0.408		mg/L		102	80 - 120	2	20
Lead			1.00	1.01		mg/L		101	80 - 120	3	20
Selenium			4.00	4.34		mg/L		109	80 - 120	2	20
Silver			0.600	0.591		mg/L		99	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-145876/1-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:33	1

Lab Sample ID: LCS 580-145876/2-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.0200	0.0171		mg/L		85	80 - 120		

Lab Sample ID: LCSD 580-145876/3-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.0200	0.0168		mg/L		84	80 - 120	2	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40425-1

Client Sample ID: SP-A7A2-092013

Lab Sample ID: 580-40425-1

Date Collected: 09/20/13 09:53

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	Analysis	8260B		1	145776	09/25/13 19:25	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	JJP	TAL SEA

Client Sample ID: SP-A7A1-092013

Lab Sample ID: 580-40425-2

Date Collected: 09/20/13 09:53

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	146067	09/29/13 06:42	CGM	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 21:01	SGH	TAL SEA
TCLP	Analysis	7470A		1	146027	09/27/13 15:02	PAB	TAL SEA
TCLP	Analysis	6010B		1	146143	09/30/13 11:07	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	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

TestAmerica Job ID: 580-40425-1

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: 580-40425-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40425-1	SP-A7A2-092013	Solid	09/20/13 09:53	09/21/13 10:30
580-40425-2	SP-A7A1-092013	Solid	09/20/13 09:53	09/21/13 10:30

BNSF RAILWAY — CHAIN OF CUSTODY

LAB WORK ORDER: 40425

LABORATORY INFORMATION

Laboratory: TEST AMERICA
Project Manager: KRIS ALLEN
Address: 5755 8TH ST. E
Phone:
City/State/ZIP: TACOMA, WA 98424
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

Project State of Origin: WA
BNSF Project Number: 13960110.04
Project City: SPOKANE
BNSF Project Name: PARKWATER
BNSF Contact: BRUCE SHEPPARD
BNSF Work Order No.: TI0101-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Project Number: 13960110.04
Project Manager: HOWARD YOUNG
Address: 31001 32nd AVE S, SUITE 100
Email: howard.young@kennedyjenks.com
City/State/ZIP: FEDERAL WAY, WA 98001
Phone: 253-835-6400
Fax: 253-952-3435

TURNAROUND TIME

- [ ] 1-day Rush
- [ ] 5- to 8-day Rush
- [ ] 2-day Rush
- [ ] Standard 10-Day
- [x] 3-day Rush
- [x] Other SEE COMMENTS

DELIVERABLES

- [ ] BNSF Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [x] Other Deliverables? K/J (Custom EDD)
- [x] EDD Req, Format?

SAMPLE INFORMATION

	Sample Identification	Containers	Sample Collection Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS (SW1311/6010)	SEMI VOLATILE ORGANICS (8270)	PCBs (SW8082)	VOLATILE ORGANIC COMPOUNDS (8260)	COMMENTS	LAB USE
1	SP-A7A2-092013	1	9/20/13	0953	HY	NA	G	S				X	1	
2	SP-A7A1-092013	2	9/20/13	0953	HY	NA	C	S	X	X	X		2	
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

Cooler/TB Dig/IR cor 4.7 unc 1.7
Cooler Dsc blue/white @ Lab
Wet/Packs Packing bubble
wics. fedex sat.

Cooler/TB Dig/IR cor 1.7 unc 2.3
Cooler Dsc blue/white @ Lab
Wet/Packs Packing bubble
wics. fedex sat

580-40425 Chain of Custody

Relinquished By:	Date/Time:	Received By:	Date/Time:
	9/20/13 1430		9/20/13 1430
Relinquished By:	Date/Time:	Received By:	Date/Time:
	9/20/13 1500		9/21/13 1030
Relinquished By:	Date/Time:	Received By:	Date/Time:

Comments and Special Analytical Requirements:
TCLP METALS - 3 DAY RUSH (24HR)
VOCs, SVOCs, PCBs - 3 DAY RUSH

Received by Laboratory:	Date/Time:	Lab Remarks:	Lab: Custody Intact?	Custody Seal No.	BNSF COC No
			☐ Yes ☐ No		

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
DUPLICATE - CONSULTANT
TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40425-1

Login Number: 40425

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.	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: 580-40423-1
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:
10/1/2013 2:09:28 PM

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

Table of Contents

Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Job ID: 580-40423-1

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 2.7º C and 4.7º C.

The following samples to be analyzed by method 8260 were received and analyzed from an unpreserved bulk soil jar: SP-A7B2-092013 (580-40423-1).

GC/MS VOA - Method(s) 8260B
The following sample(s) was prepared outside of preparation holding time: SP-A7B2-092013 (580-40423-1); they were received as bulk soil more than 48 hours after sampling.

The RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 145776 recovered outside control limits for the following analytes: Benzene. The individual recoveries met the acceptance limit. No further action was taken on this outlier.

GC/MS Semi VOA - Method(s) 8270C
The recovery of the LCS and LCSD is outside of recovery limits for several compounds. The samples will be re-extracted and re-analysed. The data from the original extraction has been qualified and reported.

No other analytical or quality issues were noted.

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.

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Client Sample ID: SP-A7B2-092013
Date Collected: 09/20/13 09:28
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40423-1
Matrix: Solid
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,1,1-Trichloroethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,1,2,2-Tetrachloroethane	ND	H	12		ug/Kg	☼		09/25/13 19:04	1
1,1,2-Trichloroethane	ND	H	14		ug/Kg	☼		09/25/13 19:04	1
1,1-Dichloroethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,1-Dichloroethene	ND	H	24		ug/Kg	☼		09/25/13 19:04	1
1,1-Dichloropropene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,2,3-Trichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,2,3-Trichloropropane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,2,4-Trichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,2,4-Trimethylbenzene	**57**	**H**	47		ug/Kg	☼		09/25/13 19:04	1
1,2-Dibromo-3-Chloropropane	ND	H	240		ug/Kg	☼		09/25/13 19:04	1
1,2-Dichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,2-Dichloroethane	ND	H	19		ug/Kg	☼		09/25/13 19:04	1
1,2-Dichloropropane	ND	H	14		ug/Kg	☼		09/25/13 19:04	1
1,3,5-Trimethylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,3-Dichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,3-Dichloropropane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
1,4-Dichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
2,2-Dichloropropane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
2-Chlorotoluene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
4-Chlorotoluene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
4-Isopropyltoluene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Acetone	ND	H	470		ug/Kg	☼		09/25/13 19:04	1
Benzene	**25**	**H ***	19		ug/Kg	☼		09/25/13 19:04	1
Bromobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Bromoform	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Bromomethane	ND	H	170		ug/Kg	☼		09/25/13 19:04	1
Carbon tetrachloride	ND	H	24		ug/Kg	☼		09/25/13 19:04	1
Chlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Chlorobromomethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Chlorodibromomethane	ND	H	24		ug/Kg	☼		09/25/13 19:04	1
Chloroethane	ND	H	470		ug/Kg	☼		09/25/13 19:04	1
Chloroform	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Chloromethane	ND	H	470		ug/Kg	☼		09/25/13 19:04	1
cis-1,2-Dichloroethene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
cis-1,3-Dichloropropene	ND	H	19		ug/Kg	☼		09/25/13 19:04	1
Dibromomethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Dichlorobromomethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Dichlorodifluoromethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Ethylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Ethylene Dibromide	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Hexachlorobutadiene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Isopropylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Methyl tert-butyl ether	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Methylene Chloride	ND	H	19		ug/Kg	☼		09/25/13 19:04	1
m-Xylene & p-Xylene	**130**	**H**	47		ug/Kg	☼		09/25/13 19:04	1
Naphthalene	**73**	**H**	47		ug/Kg	☼		09/25/13 19:04	1
n-Butylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Client Sample ID: SP-A7B2-092013
Date Collected: 09/20/13 09:28
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40423-1
Matrix: Solid
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
o-Xylene	**93**	**H**	47		ug/Kg	☼		09/25/13 19:04	1
sec-Butylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Styrene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
tert-Butylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Tetrachloroethene	ND	H	24		ug/Kg	☼		09/25/13 19:04	1
Toluene	**130**	**H**	47		ug/Kg	☼		09/25/13 19:04	1
trans-1,2-Dichloroethene	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
trans-1,3-Dichloropropene	ND	H	19		ug/Kg	☼		09/25/13 19:04	1
Trichloroethene	ND	H	19		ug/Kg	☼		09/25/13 19:04	1
Trichlorofluoromethane	ND	H	47		ug/Kg	☼		09/25/13 19:04	1
Vinyl chloride	ND	H	9.5		ug/Kg	☼		09/25/13 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*		*09/25/13 19:04*	*1*
Ethylbenzene-d10	*97*		*70 - 120*		*09/25/13 19:04*	*1*
Fluorobenzene (Surr)	*95*		*80 - 120*		*09/25/13 19:04*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/25/13 19:04*	*1*
Trifluorotoluene (Surr)	*97*		*65 - 140*		*09/25/13 19:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**84**		0.10		%			09/25/13 11:40	1
Percent Moisture	**16**		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Client Sample ID: SP-A7B1-092013
Date Collected: 09/20/13 09:28
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40423-2
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		110		ug/Kg	☼		09/29/13 06:18	1
Bis(2-chloroethyl)ether	ND		110		ug/Kg	☼		09/29/13 06:18	1
2-Chlorophenol	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
1,3-Dichlorobenzene	ND		55		ug/Kg	☼		09/29/13 06:18	1
1,4-Dichlorobenzene	ND		55		ug/Kg	☼		09/29/13 06:18	1
Benzyl alcohol	ND		110		ug/Kg	☼		09/29/13 06:18	1
1,2-Dichlorobenzene	ND		60		ug/Kg	☼		09/29/13 06:18	1
2-Methylphenol	ND		110		ug/Kg	☼		09/29/13 06:18	1
3 & 4 Methylphenol	ND		220		ug/Kg	☼		09/29/13 06:18	1
N-Nitrosodi-n-propylamine	ND		110		ug/Kg	☼		09/29/13 06:18	1
Hexachloroethane	ND		110		ug/Kg	☼		09/29/13 06:18	1
Nitrobenzene	ND		110		ug/Kg	☼		09/29/13 06:18	1
Isophorone	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
2-Nitrophenol	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
2,4-Dimethylphenol	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
Benzoic acid	ND		2700		ug/Kg	☼		09/29/13 06:18	1
Bis(2-chloroethoxy)methane	ND		110		ug/Kg	☼		09/29/13 06:18	1
2,4-Dichlorophenol	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
1,2,4-Trichlorobenzene	ND		55		ug/Kg	☼		09/29/13 06:18	1
Naphthalene	**200**		22		ug/Kg	☼		09/29/13 06:18	1
4-Chloroaniline	ND		110		ug/Kg	☼		09/29/13 06:18	1
Hexachlorobutadiene	ND		55		ug/Kg	☼		09/29/13 06:18	1
4-Chloro-3-methylphenol	ND		110		ug/Kg	☼		09/29/13 06:18	1
2-Methylnaphthalene	**250**		22		ug/Kg	☼		09/29/13 06:18	1
Hexachlorocyclopentadiene	ND		110		ug/Kg	☼		09/29/13 06:18	1
2,4,6-Trichlorophenol	ND		160		ug/Kg	☼		09/29/13 06:18	1
2,4,5-Trichlorophenol	ND		110		ug/Kg	☼		09/29/13 06:18	1
2-Chloronaphthalene	ND		22		ug/Kg	☼		09/29/13 06:18	1
2-Nitroaniline	ND		110		ug/Kg	☼		09/29/13 06:18	1
Dimethyl phthalate	ND		110		ug/Kg	☼		09/29/13 06:18	1
Acenaphthylene	**100**		22		ug/Kg	☼		09/29/13 06:18	1
2,6-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 06:18	1
3-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
Acenaphthene	**140**		22		ug/Kg	☼		09/29/13 06:18	1
2,4-Dinitrophenol	ND		1100		ug/Kg	☼		09/29/13 06:18	1
4-Nitrophenol	ND		1100		ug/Kg	☼		09/29/13 06:18	1
Dibenzofuran	**140**		110		ug/Kg	☼		09/29/13 06:18	1
2,4-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 06:18	1
Diethyl phthalate	ND		220		ug/Kg	☼		09/29/13 06:18	1
4-Chlorophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 06:18	1
Fluorene	**120**		22		ug/Kg	☼		09/29/13 06:18	1
4-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 06:18	1
4,6-Dinitro-2-methylphenol	ND		1100		ug/Kg	☼		09/29/13 06:18	1
N-Nitrosodiphenylamine	ND		55		ug/Kg	☼		09/29/13 06:18	1
4-Bromophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 06:18	1
Hexachlorobenzene	ND		55		ug/Kg	☼		09/29/13 06:18	1
Pentachlorophenol	ND		220		ug/Kg	☼		09/29/13 06:18	1
Phenanthrene	**1800**		22		ug/Kg	☼		09/29/13 06:18	1
Anthracene	**490**		22		ug/Kg	☼		09/29/13 06:18	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Client Sample ID: SP-A7B1-092013
Date Collected: 09/20/13 09:28
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40423-2
Matrix: Solid
Percent Solids: 88.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		550		ug/Kg	☼		09/29/13 06:18	1
Fluoranthene	**3100**		22		ug/Kg	☼		09/29/13 06:18	1
Pyrene	**3000**		22		ug/Kg	☼		09/29/13 06:18	1
Butyl benzyl phthalate	ND		220		ug/Kg	☼		09/29/13 06:18	1
3,3'-Dichlorobenzidine	ND	*	220		ug/Kg	☼		09/29/13 06:18	1
Benzo[a]anthracene	**1600**		22		ug/Kg	☼		09/29/13 06:18	1
Chrysene	**1800**		27		ug/Kg	☼		09/29/13 06:18	1
Bis(2-ethylhexyl) phthalate	ND		660		ug/Kg	☼		09/29/13 06:18	1
Di-n-octyl phthalate	ND		550		ug/Kg	☼		09/29/13 06:18	1
Benzo[a]pyrene	**1900**		33		ug/Kg	☼		09/29/13 06:18	1
Indeno[1,2,3-cd]pyrene	**650**		44		ug/Kg	☼		09/29/13 06:18	1
Dibenz(a,h)anthracene	**170**		44		ug/Kg	☼		09/29/13 06:18	1
Benzo[g,h,i]perylene	**650**		27		ug/Kg	☼		09/29/13 06:18	1
Carbazole	**270**		110		ug/Kg	☼		09/29/13 06:18	1
1-Methylnaphthalene	**200**		33		ug/Kg	☼		09/29/13 06:18	1
Benzo[b]fluoranthene	**3300**		22		ug/Kg	☼		09/29/13 06:18	1
Benzo[k]fluoranthene	**1300**		27		ug/Kg	☼		09/29/13 06:18	1
bis (2-chloroisopropyl) ether	ND		270		ug/Kg	☼		09/29/13 06:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*90*		*36 - 145*		*09/29/13 06:18*	*1*
Phenol-d5	*89*		*38 - 149*		*09/29/13 06:18*	*1*
Nitrobenzene-d5	*94*		*38 - 141*		*09/29/13 06:18*	*1*
2-Fluorobiphenyl	*82*		*42 - 140*		*09/29/13 06:18*	*1*
2,4,6-Tribromophenol	*86*		*28 - 143*		*09/29/13 06:18*	*1*
Terphenyl-d14	*100*		*42 - 151*		*09/29/13 06:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼		09/26/13 20:47	1
PCB-1221	ND		0.012		mg/Kg	☼		09/26/13 20:47	1
PCB-1232	ND		0.012		mg/Kg	☼		09/26/13 20:47	1
PCB-1242	ND		0.011		mg/Kg	☼		09/26/13 20:47	1
PCB-1248	ND		0.011		mg/Kg	☼		09/26/13 20:47	1
PCB-1254	ND		0.011		mg/Kg	☼		09/26/13 20:47	1
PCB-1260	**0.073**		0.011		mg/Kg	☼		09/26/13 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*45 - 135*		*09/26/13 20:47*	*1*
DCB Decachlorobiphenyl	*87*		*50 - 140*		*09/26/13 20:47*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:59	1
Barium	**0.35**		0.010		mg/L			09/30/13 10:59	1
Cadmium	**0.022**		0.010		mg/L			09/30/13 10:59	1
Chromium	ND		0.025		mg/L			09/30/13 10:59	1
Lead	**0.11**		0.030		mg/L			09/30/13 10:59	1
Selenium	ND		0.10		mg/L			09/30/13 10:59	1
Silver	ND		0.050		mg/L			09/30/13 10:59	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Client Sample ID: SP-A7B1-092013
Date Collected: 09/20/13 09:28
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40423-2
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/25/13 11:40	1
Percent Moisture	12		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,1-Trichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg			09/25/13 12:19	1
1,1,2-Trichloroethane	ND		12		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethene	ND		20		ug/Kg			09/25/13 12:19	1
1,1-Dichloropropene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg			09/25/13 12:19	1
1,2-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dichloroethane	ND		16		ug/Kg			09/25/13 12:19	1
1,2-Dichloropropane	ND		12		ug/Kg			09/25/13 12:19	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,4-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
2,2-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
2-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Isopropyltoluene	ND		40		ug/Kg			09/25/13 12:19	1
Acetone	ND		400		ug/Kg			09/25/13 12:19	1
Benzene	ND		16		ug/Kg			09/25/13 12:19	1
Bromobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Bromoform	ND		40		ug/Kg			09/25/13 12:19	1
Bromomethane	ND		140		ug/Kg			09/25/13 12:19	1
Carbon tetrachloride	ND		20		ug/Kg			09/25/13 12:19	1
Chlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Chlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Chlorodibromomethane	ND		20		ug/Kg			09/25/13 12:19	1
Chloroethane	ND		400		ug/Kg			09/25/13 12:19	1
Chloroform	ND		40		ug/Kg			09/25/13 12:19	1
Chloromethane	ND		400		ug/Kg			09/25/13 12:19	1
cis-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
cis-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Dibromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorodifluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Ethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Ethylene Dibromide	ND		40		ug/Kg			09/25/13 12:19	1
Hexachlorobutadiene	ND		40		ug/Kg			09/25/13 12:19	1
Isopropylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Methyl tert-butyl ether	ND		40		ug/Kg			09/25/13 12:19	1
Methylene Chloride	ND		16		ug/Kg			09/25/13 12:19	1
m-Xylene & p-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
Naphthalene	ND		40		ug/Kg			09/25/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
N-Propylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
o-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
sec-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Styrene	ND		40		ug/Kg			09/25/13 12:19	1
tert-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Tetrachloroethene	ND		20		ug/Kg			09/25/13 12:19	1
Toluene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Trichloroethene	ND		16		ug/Kg			09/25/13 12:19	1
Trichlorofluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Vinyl chloride	ND		8.0		ug/Kg			09/25/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 120*		*09/25/13 12:19*	*1*
Ethylbenzene-d10	*116*		*70 - 120*		*09/25/13 12:19*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*		*09/25/13 12:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/25/13 12:19*	*1*
Trifluorotoluene (Surr)	*102*		*65 - 140*		*09/25/13 12:19*	*1*

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	651		ug/Kg		81	72 - 123
1,1,1-Trichloroethane	800	700		ug/Kg		87	63 - 135
1,1,2,2-Tetrachloroethane	800	755		ug/Kg		94	73 - 125
1,1,2-Trichloroethane	800	772		ug/Kg		96	77 - 124
1,1-Dichloroethane	800	766		ug/Kg		96	70 - 128
1,1-Dichloroethene	800	764		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 123
1,2,3-Trichlorobenzene	800	521		ug/Kg		65	61 - 130
1,2,3-Trichloropropane	800	803		ug/Kg		100	77 - 123
1,2,4-Trichlorobenzene	800	589		ug/Kg		74	61 - 130
1,2,4-Trimethylbenzene	800	762		ug/Kg		95	79 - 124
1,2-Dibromo-3-Chloropropane	800	424		ug/Kg		53	53 - 132
1,2-Dichlorobenzene	800	756		ug/Kg		94	79 - 117
1,2-Dichloroethane	800	674		ug/Kg		84	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	754		ug/Kg		94	80 - 125
1,3-Dichlorobenzene	800	758		ug/Kg		95	79 - 119
1,3-Dichloropropane	800	786		ug/Kg		98	77 - 123
1,4-Dichlorobenzene	800	745		ug/Kg		93	79 - 117
2,2-Dichloropropane	800	711		ug/Kg		89	56 - 144
2-Chlorotoluene	800	778		ug/Kg		97	79 - 122
4-Chlorotoluene	800	821		ug/Kg		103	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	731		ug/Kg		91	78 - 126
Acetone	3200	2340		ug/Kg		73	20 - 160
Benzene	800	971		ug/Kg		121	70 - 128
Bromobenzene	800	793		ug/Kg		99	80 - 120
Bromoform	800	491		ug/Kg		61	50 - 124
Bromomethane	800	950		ug/Kg		119	57 - 148
Carbon tetrachloride	800	693		ug/Kg		87	59 - 145
Chlorobenzene	800	809		ug/Kg		101	75 - 120
Chlorobromomethane	800	741		ug/Kg		93	78 - 123
Chlorodibromomethane	800	609		ug/Kg		76	69 - 129
Chloroethane	800	839		ug/Kg		105	48 - 167
Chloroform	800	775		ug/Kg		97	78 - 125
Chloromethane	800	696		ug/Kg		87	55 - 136
cis-1,2-Dichloroethene	800	772		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	800	693		ug/Kg		87	69 - 129
Dibromomethane	800	793		ug/Kg		99	78 - 126
Dichlorobromomethane	800	580		ug/Kg		73	58 - 133
Dichlorodifluoromethane	800	700		ug/Kg		88	38 - 150
Ethylbenzene	800	814		ug/Kg		102	78 - 126
Ethylene Dibromide	800	803		ug/Kg		100	69 - 126
Hexachlorobutadiene	800	723		ug/Kg		90	68 - 134
Isopropylbenzene	800	804		ug/Kg		100	79 - 127
Methyl tert-butyl ether	800	690		ug/Kg		86	65 - 125
Methylene Chloride	800	770		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	829		ug/Kg		104	78 - 126
Naphthalene	800	577		ug/Kg		72	14 - 170
n-Butylbenzene	800	659		ug/Kg		82	78 - 128
N-Propylbenzene	800	772		ug/Kg		96	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	722		ug/Kg		90	78 - 128
Styrene	800	850		ug/Kg		106	79 - 127
tert-Butylbenzene	800	764		ug/Kg		95	71 - 136
Tetrachloroethene	800	840		ug/Kg		105	56 - 150
Toluene	800	817		ug/Kg		102	75 - 126
trans-1,2-Dichloroethene	800	768		ug/Kg		96	76 - 131
trans-1,3-Dichloropropene	800	664		ug/Kg		83	72 - 129
Trichloroethene	800	807		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	701		ug/Kg		88	47 - 165
Vinyl chloride	800	741		ug/Kg		93	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*99*		*70 - 120*
Fluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	800	667		ug/Kg		83	72 - 123	2	20
1,1,1-Trichloroethane	800	715		ug/Kg		89	63 - 135	2	20
1,1,2,2-Tetrachloroethane	800	783		ug/Kg		98	73 - 125	4	22
1,1,2-Trichloroethane	800	780		ug/Kg		97	77 - 124	1	18
1,1-Dichloroethane	800	800		ug/Kg		100	70 - 128	4	21
1,1-Dichloroethene	800	744		ug/Kg		93	70 - 133	3	23
1,1-Dichloropropene	800	815		ug/Kg		102	77 - 123	0	16
1,2,3-Trichlorobenzene	800	544		ug/Kg		68	61 - 130	4	23
1,2,3-Trichloropropane	800	807		ug/Kg		101	77 - 123	1	23
1,2,4-Trichlorobenzene	800	618		ug/Kg		77	61 - 130	5	22
1,2,4-Trimethylbenzene	800	761		ug/Kg		95	79 - 124	0	18
1,2-Dibromo-3-Chloropropane	800	465		ug/Kg		58	53 - 132	9	27
1,2-Dichlorobenzene	800	743		ug/Kg		93	79 - 117	2	17
1,2-Dichloroethane	800	758		ug/Kg		95	71 - 128	12	18
1,2-Dichloropropane	800	1010		ug/Kg		126	76 - 161	4	15
1,3,5-Trimethylbenzene	800	759		ug/Kg		95	80 - 125	1	18
1,3-Dichlorobenzene	800	759		ug/Kg		95	79 - 119	0	17
1,3-Dichloropropane	800	808		ug/Kg		101	77 - 123	3	19
1,4-Dichlorobenzene	800	747		ug/Kg		93	79 - 117	0	18
2,2-Dichloropropane	800	717		ug/Kg		90	56 - 144	1	21
2-Chlorotoluene	800	808		ug/Kg		101	79 - 122	4	18
4-Chlorotoluene	800	786		ug/Kg		98	80 - 122	4	18
4-Isopropyltoluene	800	711		ug/Kg		89	78 - 126	3	18
Acetone	3200	2660		ug/Kg		83	20 - 160	13	30
Benzene	800	783	*	ug/Kg		98	70 - 128	21	19
Bromobenzene	800	815		ug/Kg		102	80 - 120	3	19
Bromoform	800	525		ug/Kg		66	50 - 124	7	25
Bromomethane	800	958		ug/Kg		120	57 - 148	1	29
Carbon tetrachloride	800	723		ug/Kg		90	59 - 145	4	19
Chlorobenzene	800	809		ug/Kg		101	75 - 120	0	21
Chlorobromomethane	800	814		ug/Kg		102	78 - 123	9	19
Chlorodibromomethane	800	616		ug/Kg		77	69 - 129	1	23
Chloroethane	800	931		ug/Kg		116	48 - 167	10	53
Chloroform	800	788		ug/Kg		98	78 - 125	2	17
Chloromethane	800	751		ug/Kg		94	55 - 136	8	26
cis-1,2-Dichloroethene	800	797		ug/Kg		100	70 - 130	3	19
cis-1,3-Dichloropropene	800	677		ug/Kg		85	69 - 129	2	19
Dibromomethane	800	788		ug/Kg		98	78 - 126	1	18
Dichlorobromomethane	800	587		ug/Kg		73	58 - 133	1	19
Dichlorodifluoromethane	800	729		ug/Kg		91	38 - 150	4	26
Ethylbenzene	800	823		ug/Kg		103	78 - 126	1	23
Ethylene Dibromide	800	838		ug/Kg		105	69 - 126	4	21
Hexachlorobutadiene	800	698		ug/Kg		87	68 - 134	4	21
Isopropylbenzene	800	783		ug/Kg		98	79 - 127	3	20
Methyl tert-butyl ether	800	744		ug/Kg		93	65 - 125	8	30
Methylene Chloride	800	773		ug/Kg		97	57 - 146	0	21
m-Xylene & p-Xylene	800	838		ug/Kg		105	78 - 126	1	23
Naphthalene	800	632		ug/Kg		79	14 - 170	9	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			800	659		ug/Kg		82	78 - 128	0	17
N-Propylbenzene			800	764		ug/Kg		95	81 - 127	1	20
o-Xylene			800	800		ug/Kg		100	77 - 127	0	22
sec-Butylbenzene			800	724		ug/Kg		90	78 - 128	0	17
Styrene			800	846		ug/Kg		106	79 - 127	1	21
tert-Butylbenzene			800	755		ug/Kg		94	71 - 136	1	27
Tetrachloroethene			800	815		ug/Kg		102	56 - 150	3	27
Toluene			800	807		ug/Kg		101	75 - 126	1	19
trans-1,2-Dichloroethene			800	789		ug/Kg		99	76 - 131	3	18
trans-1,3-Dichloropropene			800	683		ug/Kg		85	72 - 129	3	20
Trichloroethene			800	811		ug/Kg		101	83 - 124	0	17
Trichlorofluoromethane			800	690		ug/Kg		86	47 - 165	2	54
Vinyl chloride			800	754		ug/Kg		94	67 - 131	2	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*
Ethylbenzene-d10	*100*		*70 - 120*
Fluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*65 - 140*

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg			09/29/13 01:03	1
2-Chlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,3-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
1,4-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Benzyl alcohol	ND		100		ug/Kg			09/29/13 01:03	1
1,2-Dichlorobenzene	ND		55		ug/Kg			09/29/13 01:03	1
2-Methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
3 & 4 Methylphenol	ND		200		ug/Kg			09/29/13 01:03	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg			09/29/13 01:03	1
Hexachloroethane	ND		100		ug/Kg			09/29/13 01:03	1
Nitrobenzene	ND		100		ug/Kg			09/29/13 01:03	1
Isophorone	ND		100		ug/Kg			09/29/13 01:03	1
2-Nitrophenol	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dimethylphenol	ND		100		ug/Kg			09/29/13 01:03	1
Benzoic acid	ND		2500		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Naphthalene	ND		20		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobutadiene	ND		50		ug/Kg			09/29/13 01:03	1
4-Chloro-3-methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Methylnaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
Hexachlorocyclopentadiene	ND		100		ug/Kg			09/29/13 01:03	1
2,4,6-Trichlorophenol	ND		150		ug/Kg			09/29/13 01:03	1
2,4,5-Trichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Chloronaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
2-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Dimethyl phthalate	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthylene	ND		20		ug/Kg			09/29/13 01:03	1
2,6-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
3-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthene	ND		20		ug/Kg			09/29/13 01:03	1
2,4-Dinitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
4-Nitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
Dibenzofuran	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
Diethyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Fluorene	ND		20		ug/Kg			09/29/13 01:03	1
4-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg			09/29/13 01:03	1
N-Nitrosodiphenylamine	ND		50		ug/Kg			09/29/13 01:03	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Pentachlorophenol	ND		200		ug/Kg			09/29/13 01:03	1
Phenanthrene	ND		20		ug/Kg			09/29/13 01:03	1
Anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Di-n-butyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Pyrene	ND		20		ug/Kg			09/29/13 01:03	1
Butyl benzyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg			09/29/13 01:03	1
Benzo[a]anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Chrysene	ND		25		ug/Kg			09/29/13 01:03	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg			09/29/13 01:03	1
Di-n-octyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Benzo[a]pyrene	ND		30		ug/Kg			09/29/13 01:03	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg			09/29/13 01:03	1
Dibenz(a,h)anthracene	ND		40		ug/Kg			09/29/13 01:03	1
Benzo[g,h,i]perylene	ND		25		ug/Kg			09/29/13 01:03	1
Carbazole	ND		100		ug/Kg			09/29/13 01:03	1
1-Methylnaphthalene	ND		30		ug/Kg			09/29/13 01:03	1
Benzo[b]fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Benzo[k]fluoranthene	ND		25		ug/Kg			09/29/13 01:03	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		36 - 145		09/29/13 01:03	1
Phenol-d5	106		38 - 149		09/29/13 01:03	1
Nitrobenzene-d5	102		38 - 141		09/29/13 01:03	1
2-Fluorobiphenyl	96		42 - 140		09/29/13 01:03	1
2,4,6-Tribromophenol	72		28 - 143		09/29/13 01:03	1
Terphenyl-d14	113		42 - 151		09/29/13 01:03	1

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1240		ug/Kg		124	66 - 126
Bis(2-chloroethyl)ether	998	970		ug/Kg		97	57 - 122
2-Chlorophenol	1000	1280	*	ug/Kg		128	65 - 125
1,3-Dichlorobenzene	1000	1020		ug/Kg		102	64 - 124
1,4-Dichlorobenzene	1010	1030		ug/Kg		102	62 - 132
Benzyl alcohol	997	1080		ug/Kg		108	42 - 147
1,2-Dichlorobenzene	1010	1000		ug/Kg		99	68 - 118
2-Methylphenol	997	1030		ug/Kg		103	56 - 121
3 & 4 Methylphenol	1000	1110		ug/Kg		111	61 - 126
N-Nitrosodi-n-propylamine	1000	995		ug/Kg		99	52 - 127
Hexachloroethane	1010	1040		ug/Kg		102	56 - 131
Nitrobenzene	1020	1110		ug/Kg		109	59 - 134
Isophorone	988	1190	*	ug/Kg		121	53 - 118
2-Nitrophenol	1010	1320	*	ug/Kg		131	58 - 128
2,4-Dimethylphenol	1010	1540	*	ug/Kg		153	58 - 133
Benzoic acid	5090	5490		ug/Kg		108	10 - 130
Bis(2-chloroethoxy)methane	998	1030		ug/Kg		103	63 - 128
2,4-Dichlorophenol	1020	1330	*	ug/Kg		131	59 - 124
1,2,4-Trichlorobenzene	1000	1010		ug/Kg		101	63 - 128
Naphthalene	1010	991		ug/Kg		98	64 - 129
4-Chloroaniline	983	627		ug/Kg		64	20 - 181
Hexachlorobutadiene	1000	1010		ug/Kg		101	59 - 134
4-Chloro-3-methylphenol	1010	1210		ug/Kg		120	58 - 128
2-Methylnaphthalene	991	1010		ug/Kg		102	65 - 125
Hexachlorocyclopentadiene	1000	797		ug/Kg		80	30 - 132
2,4,6-Trichlorophenol	1010	1120		ug/Kg		111	66 - 131
2,4,5-Trichlorophenol	1010	1050		ug/Kg		104	64 - 124
2-Chloronaphthalene	1000	1010		ug/Kg		101	69 - 129
2-Nitroaniline	983	897		ug/Kg		91	58 - 133
Dimethyl phthalate	1000	1130		ug/Kg		112	65 - 125
Acenaphthylene	1000	1090		ug/Kg		109	69 - 129
2,6-Dinitrotoluene	1000	993		ug/Kg		99	65 - 125
3-Nitroaniline	987	524	*	ug/Kg		53	80 - 165
Acenaphthene	1000	974		ug/Kg		97	65 - 130
2,4-Dinitrophenol	5060	4260		ug/Kg		84	53 - 168
4-Nitrophenol	5030	4670		ug/Kg		93	47 - 172

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

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	1010	1000		ug/Kg		100	70 - 125
2,4-Dinitrotoluene	1000	1050		ug/Kg		105	57 - 122
Diethyl phthalate	1000	1040		ug/Kg		104	64 - 129
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130
Fluorene	1010	1050		ug/Kg		104	68 - 128
4-Nitroaniline	991	686	*	ug/Kg		69	70 - 150
4,6-Dinitro-2-methylphenol	5060	5330		ug/Kg		105	38 - 143
N-Nitrosodiphenylamine	1000	1180		ug/Kg		118	88 - 153
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134
Hexachlorobenzene	1000	1030		ug/Kg		103	61 - 136
Pentachlorophenol	1000	1140		ug/Kg		114	29 - 124
Phenanthrene	1000	962		ug/Kg		96	65 - 125
Anthracene	1010	1030		ug/Kg		102	73 - 123
Di-n-butyl phthalate	1000	1060		ug/Kg		106	69 - 124
Fluoranthene	1000	1070		ug/Kg		107	61 - 121
Pyrene	998	1030		ug/Kg		103	54 - 134
Butyl benzyl phthalate	1000	1080		ug/Kg		107	65 - 140
3,3'-Dichlorobenzidine	1980	1420	*	ug/Kg		71	73 - 163
Benzo[a]anthracene	1000	1020		ug/Kg		102	64 - 124
Chrysene	992	962		ug/Kg		97	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1100		ug/Kg		110	64 - 144
Di-n-octyl phthalate	1010	986		ug/Kg		98	58 - 148
Benzo[a]pyrene	1000	1040		ug/Kg		104	68 - 128
Indeno[1,2,3-cd]pyrene	998	879		ug/Kg		88	59 - 139
Dibenz(a,h)anthracene	1000	992		ug/Kg		99	57 - 142
Benzo[g,h,i]perylene	1010	1080		ug/Kg		107	57 - 142
Carbazole	1010	1060		ug/Kg		105	88 - 158
1-Methylnaphthalene	997	1040		ug/Kg		105	48 - 148
Benzo[b]fluoranthene	1000	1100		ug/Kg		110	66 - 136
Benzo[k]fluoranthene	1010	1060		ug/Kg		105	63 - 143
bis (2-chloroisopropyl) ether	993	815		ug/Kg		82	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*113*		*36 - 145*
Phenol-d5	*108*		*38 - 149*
Nitrobenzene-d5	*104*		*38 - 141*
2-Fluorobiphenyl	*97*		*42 - 140*
2,4,6-Tribromophenol	*99*		*28 - 143*
Terphenyl-d14	*110*		*42 - 151*

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1200		ug/Kg		120	66 - 126	3	26
Bis(2-chloroethyl)ether	998	943		ug/Kg		95	57 - 122	3	60
2-Chlorophenol	1000	1220		ug/Kg		121	65 - 125	5	27

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1000	996		ug/Kg		99	64 - 124	2	60
1,4-Dichlorobenzene	1010	1010		ug/Kg		99	62 - 132	3	32
Benzyl alcohol	997	1040		ug/Kg		104	42 - 147	4	60
1,2-Dichlorobenzene	1010	978		ug/Kg		97	68 - 118	2	60
2-Methylphenol	997	985		ug/Kg		99	56 - 121	4	25
3 & 4 Methylphenol	1000	1080		ug/Kg		108	61 - 126	3	27
N-Nitrosodi-n-propylamine	1000	984		ug/Kg		98	52 - 127	1	28
Hexachloroethane	1010	963		ug/Kg		95	56 - 131	7	60
Nitrobenzene	1020	1100		ug/Kg		108	59 - 134	1	60
Isophorone	988	1170		ug/Kg		118	53 - 118	2	60
2-Nitrophenol	1010	1290		ug/Kg		128	58 - 128	2	60
2,4-Dimethylphenol	1010	1470	*	ug/Kg		146	58 - 133	5	60
Benzoic acid	5090	5140		ug/Kg		101	10 - 130	7	60
Bis(2-chloroethoxy)methane	998	996		ug/Kg		100	63 - 128	3	60
2,4-Dichlorophenol	1020	1280	*	ug/Kg		126	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	994		ug/Kg		99	63 - 128	1	28
Naphthalene	1010	971		ug/Kg		96	64 - 129	2	26
4-Chloroaniline	983	553		ug/Kg		56	20 - 181	12	60
Hexachlorobutadiene	1000	999		ug/Kg		100	59 - 134	1	60
4-Chloro-3-methylphenol	1010	1200		ug/Kg		119	58 - 128	1	27
2-Methylnaphthalene	991	966		ug/Kg		97	65 - 125	4	27
Hexachlorocyclopentadiene	1000	802		ug/Kg		80	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1120		ug/Kg		110	66 - 131	0	60
2,4,5-Trichlorophenol	1010	994		ug/Kg		98	64 - 124	6	60
2-Chloronaphthalene	1000	985		ug/Kg		98	69 - 129	2	25
2-Nitroaniline	983	891		ug/Kg		91	58 - 133	1	60
Dimethyl phthalate	1000	1090		ug/Kg		109	65 - 125	3	60
Acenaphthylene	1000	1040		ug/Kg		104	69 - 129	4	28
2,6-Dinitrotoluene	1000	995		ug/Kg		99	65 - 125	0	60
3-Nitroaniline	987	509	*	ug/Kg		52	80 - 165	3	60
Acenaphthene	1000	956		ug/Kg		95	65 - 130	2	27
2,4-Dinitrophenol	5060	4020		ug/Kg		79	53 - 168	6	60
4-Nitrophenol	5030	4730		ug/Kg		94	47 - 172	1	33
Dibenzofuran	1010	1010		ug/Kg		100	70 - 125	1	60
2,4-Dinitrotoluene	1000	1070		ug/Kg		107	57 - 122	2	31
Diethyl phthalate	1000	1030		ug/Kg		103	64 - 129	1	26
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130	0	60
Fluorene	1010	1030		ug/Kg		102	68 - 128	2	31
4-Nitroaniline	991	755		ug/Kg		76	70 - 150	10	60
4,6-Dinitro-2-methylphenol	5060	5130		ug/Kg		101	38 - 143	4	60
N-Nitrosodiphenylamine	1000	1170		ug/Kg		117	88 - 153	0	60
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134	0	60
Hexachlorobenzene	1000	1050		ug/Kg		104	61 - 136	2	60
Pentachlorophenol	1000	1120		ug/Kg		112	29 - 124	2	68
Phenanthrene	1000	951		ug/Kg		95	65 - 125	1	28
Anthracene	1010	1020		ug/Kg		102	73 - 123	0	27
Di-n-butyl phthalate	1000	1050		ug/Kg		105	69 - 124	1	60
Fluoranthene	1000	1070		ug/Kg		107	61 - 121	0	36

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene			998	1010		ug/Kg		102	54 - 134	2	31
Butyl benzyl phthalate			1000	1040		ug/Kg		104	65 - 140	3	60
3,3'-Dichlorobenzidine			1980	1300	*	ug/Kg		66	73 - 163	8	60
Benzo[a]anthracene			1000	987		ug/Kg		98	64 - 124	3	27
Chrysene			992	942		ug/Kg		95	71 - 126	2	26
Bis(2-ethylhexyl) phthalate			1000	1060		ug/Kg		106	64 - 144	4	60
Di-n-octyl phthalate			1010	972		ug/Kg		97	58 - 148	1	31
Benzo[a]pyrene			1000	1000		ug/Kg		100	68 - 128	3	30
Indeno[1,2,3-cd]pyrene			998	823		ug/Kg		82	59 - 139	7	29
Dibenz(a,h)anthracene			1000	902		ug/Kg		90	57 - 142	10	30
Benzo[g,h,i]perylene			1010	1040		ug/Kg		103	57 - 142	4	28
Carbazole			1010	1040		ug/Kg		103	88 - 158	2	60
1-Methylnaphthalene			997	1010		ug/Kg		101	48 - 148	3	30
Benzo[b]fluoranthene			1000	1090		ug/Kg		108	66 - 136	1	31
Benzo[k]fluoranthene			1010	1080		ug/Kg		108	63 - 143	2	31
bis (2-chloroisopropyl) ether			993	759		ug/Kg		76	44 - 140	7	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*104*		*36 - 145*
Phenol-d5	*101*		*38 - 149*
Nitrobenzene-d5	*101*		*38 - 141*
2-Fluorobiphenyl	*93*		*42 - 140*
2,4,6-Tribromophenol	*95*		*28 - 143*
Terphenyl-d14	*105*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg			09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*		*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*		*09/26/13 18:50*	*1*

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

Lab Sample ID: LCS 580-145585/2-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-145876/1-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:19	1
Barium	ND		0.010		mg/L			09/30/13 10:19	1
Cadmium	ND		0.010		mg/L			09/30/13 10:19	1
Chromium	ND		0.025		mg/L			09/30/13 10:19	1
Lead	ND		0.030		mg/L			09/30/13 10:19	1
Selenium	ND		0.10		mg/L			09/30/13 10:19	1
Silver	ND		0.050		mg/L			09/30/13 10:19	1

Lab Sample ID: LCS 580-145876/2-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			4.00	4.19		mg/L		105	80 - 120		
Barium			4.00	3.99		mg/L		100	80 - 120		
Cadmium			0.100	0.103		mg/L		103	80 - 120		
Chromium			0.400	0.401		mg/L		100	80 - 120		
Lead			1.00	0.980		mg/L		98	80 - 120		
Selenium			4.00	4.26		mg/L		107	80 - 120		
Silver			0.600	0.573		mg/L		95	80 - 120		

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

Lab Sample ID: LCSD 580-145876/3-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.28		mg/L		107	80 - 120	2	20
Barium	4.00	4.01		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.104		mg/L		104	80 - 120	1	20
Chromium	0.400	0.408		mg/L		102	80 - 120	2	20
Lead	1.00	1.01		mg/L		101	80 - 120	3	20
Selenium	4.00	4.34		mg/L		109	80 - 120	2	20
Silver	0.600	0.591		mg/L		99	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-145876/1-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:33	1

Lab Sample ID: LCS 580-145876/2-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0200	0.0171		mg/L		85	80 - 120

Lab Sample ID: LCSD 580-145876/3-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0200	0.0168		mg/L		84	80 - 120	2	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40423-1 DU
Matrix: Solid
Analysis Batch: 145801

Client Sample ID: SP-A7B2-092013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	84		84		%		0.2	20
Percent Moisture	16		16		%		0.9	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40423-1

Client Sample ID: SP-A7B2-092013

Lab Sample ID: 580-40423-1

Date Collected: 09/20/13 09:28

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	145776	09/25/13 19:04	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	JJP	TAL SEA

Client Sample ID: SP-A7B1-092013

Lab Sample ID: 580-40423-2

Date Collected: 09/20/13 09:28

Matrix: Solid

Date Received: 09/21/13 10:30

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	146067	09/29/13 06:18	CGM	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 20:47	SGH	TAL SEA
TCLP	Analysis	7470A		1	146027	09/27/13 14:52	PAB	TAL SEA
TCLP	Analysis	6010B		1	146143	09/30/13 10:59	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	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

TestAmerica Job ID: 580-40423-1

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: 580-40423-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40423-1	SP-A7B2-092013	Solid	09/20/13 09:28	09/21/13 10:30
580-40423-2	SP-A7B1-092013	Solid	09/20/13 09:28	09/21/13 10:30

BNSF RAILWAY

CHAIN OF CUSTODY

LAB WORK ORDER: 70423

LABORATORY INFORMATION

Laboratory: TEST AMERICA
Project Manager: KRIS ALLEN
Address: 5755 8TH ST EAST
Phone:
City/State/ZIP: TACOMA, WA 98424
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

Project State of Origin: WA
BNSF Project Number: 139610.04
Project City: SPOKANE
BNSF Project Name: PARKWATER
BNSF Contact: BRUCE SHEPPARD
BNSF Work Order No.: KOOI-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Project Number: 139610.04
Project Manager: HOWARD YOUNG
Address: 32001 32ND AVE S, SUITE 100
Email: howard.young@kennedyjenks.com
City/State/ZIP: FEDERAL WAY WA 98001
Phone: 253-835-6400
Fax: 253-952-3435

TURNAROUND TIME

- [ ] 1-day Rush
- [ ] 2-day Rush
- [x] 3-day Rush
- [ ] 5- to 8-day Rush
- [ ] Standard 10-Day
- [x] Other SEE COMMENTS

DELIVERABLES

- [ ] BNSF Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [x] Other Deliverables? KJ Custom EDD
- [x] EDD Req, Format?

METHODS FOR ANALYSIS

SAMPLE INFORMATION

	Sample identification	Containers	Sample Collection Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS (SW3111/6010)	SEMI VOLATILE ORGANICS (8270)	PCBs (SW8082)	VOLATILE ORGANIC COMPOUNDS (8260)	COMMENTS	LAB USE
1	SP-A7B2-092013	1	9/20/13	0928	HY	NA	G	S				X	1	
2	SP-A7B1-092013	2	9/20/13	0928	HY	NA	C	S	X	X	X		2	
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

580-40423 Chain of Custody

Cooler/TB Dig/IR cor 4.7°C unc 4.7°C
Cooler Dsc Lg Blue/Ambient @ Lab 10°C
Wet/Packs Packing Bubble
w/cs Feder Sud AI

Cooler/TB Dig/IR cor 2.7°C unc 2.7°C
Cooler Dsc Lg Blue/Ambient @ Lab 10°C
Wet/Packs Packing Bubble
w/cs Feder Sud AI

	Date/Time	Received By	Date/Time
Relinquished By:	9/20/13 1530		9/20/13 1430
Relinquished By:	9/20/13 1800		9/21/13 1030
Relinquished By:			
Received by Laboratory:		Lab Remarks:	Lab: Custody Intact? ☐ Yes ☐ No

Comments and Special Analytical Requirements:
TCLP METALS - 3DAY RUSH (24 HR)
VOCs, SVOCs, PCBs - 3DAY RUSH

Custody Seal No.:
BNSF COC No.:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
DUPLICATE - CONSULTANT
TAL-1001 (06/08)

10/1/2013

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40423-1

Login Number: 40423

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.	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: 580-40426-1
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:
10/1/2013 2:18:12 PM

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

Table of Contents

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Job ID: 580-40426-1

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 2.7º C and 4.7º C.

The following samples to be analyzed by method 8260 were received and analyzed from an unpreserved bulk soil jar: SP-A7C2-092013 (580-40426-1).

GC/MS VOA - Method(s) 8260B
The following sample(s) was prepared outside of preparation holding time: SP-A7C2-092013 (580-40426-1); they were received as bulk soil more than 48 hours after sampling.

The RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 145776 recovered outside control limits for the following analytes: Benzene. The individual recoveries met the acceptance limit. No further action was taken on this outlier.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C
The recovery of the LCS and LCSD is outside of recovery limits for several compounds. The samples will be re-extracted and re-analysed. The data from the original extraction has been 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.

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Client Sample ID: SP-A7C2-092013
Date Collected: 09/20/13 09:40
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40426-1
Matrix: Solid
Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,1,1-Trichloroethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,1,2,2-Tetrachloroethane	ND	H	12		ug/Kg	☼		09/25/13 19:46	1
1,1,2-Trichloroethane	ND	H	14		ug/Kg	☼		09/25/13 19:46	1
1,1-Dichloroethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,1-Dichloroethene	ND	H	24		ug/Kg	☼		09/25/13 19:46	1
1,1-Dichloropropene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,2,3-Trichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,2,3-Trichloropropane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,2,4-Trichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,2,4-Trimethylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,2-Dibromo-3-Chloropropane	ND	H	240		ug/Kg	☼		09/25/13 19:46	1
1,2-Dichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,2-Dichloroethane	ND	H	19		ug/Kg	☼		09/25/13 19:46	1
1,2-Dichloropropane	ND	H	14		ug/Kg	☼		09/25/13 19:46	1
1,3,5-Trimethylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,3-Dichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,3-Dichloropropane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
1,4-Dichlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
2,2-Dichloropropane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
2-Chlorotoluene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
4-Chlorotoluene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
4-Isopropyltoluene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Acetone	ND	H	470		ug/Kg	☼		09/25/13 19:46	1
Benzene	**57**	**H ***	19		ug/Kg	☼		09/25/13 19:46	1
Bromobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Bromoform	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Bromomethane	ND	H	170		ug/Kg	☼		09/25/13 19:46	1
Carbon tetrachloride	ND	H	24		ug/Kg	☼		09/25/13 19:46	1
Chlorobenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Chlorobromomethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Chlorodibromomethane	ND	H	24		ug/Kg	☼		09/25/13 19:46	1
Chloroethane	ND	H	470		ug/Kg	☼		09/25/13 19:46	1
Chloroform	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Chloromethane	ND	H	470		ug/Kg	☼		09/25/13 19:46	1
cis-1,2-Dichloroethene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
cis-1,3-Dichloropropene	ND	H	19		ug/Kg	☼		09/25/13 19:46	1
Dibromomethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Dichlorobromomethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Dichlorodifluoromethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Ethylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Ethylene Dibromide	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Hexachlorobutadiene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Isopropylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Methyl tert-butyl ether	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Methylene Chloride	ND	H	19		ug/Kg	☼		09/25/13 19:46	1
m-Xylene & p-Xylene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Naphthalene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
n-Butylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Client Sample ID: SP-A7C2-092013
Date Collected: 09/20/13 09:40
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40426-1
Matrix: Solid
Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
o-Xylene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
sec-Butylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Styrene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
tert-Butylbenzene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Tetrachloroethene	ND	H	24		ug/Kg	☼		09/25/13 19:46	1
Toluene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
trans-1,2-Dichloroethene	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
trans-1,3-Dichloropropene	ND	H	19		ug/Kg	☼		09/25/13 19:46	1
Trichloroethene	ND	H	19		ug/Kg	☼		09/25/13 19:46	1
Trichlorofluoromethane	ND	H	47		ug/Kg	☼		09/25/13 19:46	1
Vinyl chloride	ND	H	9.5		ug/Kg	☼		09/25/13 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 120*		*09/25/13 19:46*	*1*
Ethylbenzene-d10	*98*		*70 - 120*		*09/25/13 19:46*	*1*
Fluorobenzene (Surr)	*96*		*80 - 120*		*09/25/13 19:46*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/25/13 19:46*	*1*
Trifluorotoluene (Surr)	*90*		*65 - 140*		*09/25/13 19:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**81**		0.10		%			09/25/13 11:40	1
Percent Moisture	**19**		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Client Sample ID: SP-A7C1-092013
Date Collected: 09/20/13 09:47
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40426-2
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		110		ug/Kg	☼		09/29/13 07:06	1
Bis(2-chloroethyl)ether	ND		110		ug/Kg	☼		09/29/13 07:06	1
2-Chlorophenol	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
1,3-Dichlorobenzene	ND		55		ug/Kg	☼		09/29/13 07:06	1
1,4-Dichlorobenzene	ND		55		ug/Kg	☼		09/29/13 07:06	1
Benzyl alcohol	ND		110		ug/Kg	☼		09/29/13 07:06	1
1,2-Dichlorobenzene	ND		60		ug/Kg	☼		09/29/13 07:06	1
2-Methylphenol	ND		110		ug/Kg	☼		09/29/13 07:06	1
3 & 4 Methylphenol	ND		220		ug/Kg	☼		09/29/13 07:06	1
N-Nitrosodi-n-propylamine	ND		110		ug/Kg	☼		09/29/13 07:06	1
Hexachloroethane	ND		110		ug/Kg	☼		09/29/13 07:06	1
Nitrobenzene	ND		110		ug/Kg	☼		09/29/13 07:06	1
Isophorone	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
2-Nitrophenol	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
2,4-Dimethylphenol	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
Benzoic acid	ND		2700		ug/Kg	☼		09/29/13 07:06	1
Bis(2-chloroethoxy)methane	ND		110		ug/Kg	☼		09/29/13 07:06	1
2,4-Dichlorophenol	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
1,2,4-Trichlorobenzene	ND		55		ug/Kg	☼		09/29/13 07:06	1
Naphthalene	**130**		22		ug/Kg	☼		09/29/13 07:06	1
4-Chloroaniline	ND		110		ug/Kg	☼		09/29/13 07:06	1
Hexachlorobutadiene	ND		55		ug/Kg	☼		09/29/13 07:06	1
4-Chloro-3-methylphenol	ND		110		ug/Kg	☼		09/29/13 07:06	1
2-Methylnaphthalene	**160**		22		ug/Kg	☼		09/29/13 07:06	1
Hexachlorocyclopentadiene	ND		110		ug/Kg	☼		09/29/13 07:06	1
2,4,6-Trichlorophenol	ND		160		ug/Kg	☼		09/29/13 07:06	1
2,4,5-Trichlorophenol	ND		110		ug/Kg	☼		09/29/13 07:06	1
2-Chloronaphthalene	ND		22		ug/Kg	☼		09/29/13 07:06	1
2-Nitroaniline	ND		110		ug/Kg	☼		09/29/13 07:06	1
Dimethyl phthalate	ND		110		ug/Kg	☼		09/29/13 07:06	1
Acenaphthylene	**140**		22		ug/Kg	☼		09/29/13 07:06	1
2,6-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 07:06	1
3-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
Acenaphthene	**120**		22		ug/Kg	☼		09/29/13 07:06	1
2,4-Dinitrophenol	ND		1100		ug/Kg	☼		09/29/13 07:06	1
4-Nitrophenol	ND		1100		ug/Kg	☼		09/29/13 07:06	1
Dibenzofuran	ND		110		ug/Kg	☼		09/29/13 07:06	1
2,4-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 07:06	1
Diethyl phthalate	ND		220		ug/Kg	☼		09/29/13 07:06	1
4-Chlorophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 07:06	1
Fluorene	**110**		22		ug/Kg	☼		09/29/13 07:06	1
4-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 07:06	1
4,6-Dinitro-2-methylphenol	ND		1100		ug/Kg	☼		09/29/13 07:06	1
N-Nitrosodiphenylamine	ND		55		ug/Kg	☼		09/29/13 07:06	1
4-Bromophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 07:06	1
Hexachlorobenzene	ND		55		ug/Kg	☼		09/29/13 07:06	1
Pentachlorophenol	ND		220		ug/Kg	☼		09/29/13 07:06	1
Phenanthrene	**1300**		22		ug/Kg	☼		09/29/13 07:06	1
Anthracene	**390**		22		ug/Kg	☼		09/29/13 07:06	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Client Sample ID: SP-A7C1-092013
Date Collected: 09/20/13 09:47
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40426-2
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		550		ug/Kg	☼		09/29/13 07:06	1
Fluoranthene	**2500**		22		ug/Kg	☼		09/29/13 07:06	1
Pyrene	**2500**		22		ug/Kg	☼		09/29/13 07:06	1
Butyl benzyl phthalate	ND		220		ug/Kg	☼		09/29/13 07:06	1
3,3'-Dichlorobenzidine	ND	*	220		ug/Kg	☼		09/29/13 07:06	1
Benzo[a]anthracene	**1300**		22		ug/Kg	☼		09/29/13 07:06	1
Chrysene	**1300**		27		ug/Kg	☼		09/29/13 07:06	1
Bis(2-ethylhexyl) phthalate	ND		660		ug/Kg	☼		09/29/13 07:06	1
Di-n-octyl phthalate	ND		550		ug/Kg	☼		09/29/13 07:06	1
Benzo[a]pyrene	**1500**		33		ug/Kg	☼		09/29/13 07:06	1
Indeno[1,2,3-cd]pyrene	**490**		44		ug/Kg	☼		09/29/13 07:06	1
Dibenz(a,h)anthracene	**130**		44		ug/Kg	☼		09/29/13 07:06	1
Benzo[g,h,i]perylene	**490**		27		ug/Kg	☼		09/29/13 07:06	1
Carbazole	**170**		110		ug/Kg	☼		09/29/13 07:06	1
1-Methylnaphthalene	**110**		33		ug/Kg	☼		09/29/13 07:06	1
Benzo[b]fluoranthene	**2200**		22		ug/Kg	☼		09/29/13 07:06	1
Benzo[k]fluoranthene	**950**		27		ug/Kg	☼		09/29/13 07:06	1
bis (2-chloroisopropyl) ether	ND		270		ug/Kg	☼		09/29/13 07:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*91*		*36 - 145*		*09/29/13 07:06*	*1*
Phenol-d5	*87*		*38 - 149*		*09/29/13 07:06*	*1*
Nitrobenzene-d5	*92*		*38 - 141*		*09/29/13 07:06*	*1*
2-Fluorobiphenyl	*81*		*42 - 140*		*09/29/13 07:06*	*1*
2,4,6-Tribromophenol	*84*		*28 - 143*		*09/29/13 07:06*	*1*
Terphenyl-d14	*98*		*42 - 151*		*09/29/13 07:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼		09/26/13 21:44	1
PCB-1221	ND		0.012		mg/Kg	☼		09/26/13 21:44	1
PCB-1232	ND		0.012		mg/Kg	☼		09/26/13 21:44	1
PCB-1242	ND		0.011		mg/Kg	☼		09/26/13 21:44	1
PCB-1248	ND		0.011		mg/Kg	☼		09/26/13 21:44	1
PCB-1254	ND		0.011		mg/Kg	☼		09/26/13 21:44	1
PCB-1260	**0.056**		0.011		mg/Kg	☼		09/26/13 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*45 - 135*		*09/26/13 21:44*	*1*
DCB Decachlorobiphenyl	*85*		*50 - 140*		*09/26/13 21:44*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.10**		0.060		mg/L			09/30/13 11:03	1
Barium	**0.23**		0.010		mg/L			09/30/13 11:03	1
Cadmium	**0.12**		0.010		mg/L			09/30/13 11:03	1
Chromium	ND		0.025		mg/L			09/30/13 11:03	1
Lead	**0.17**		0.030		mg/L			09/30/13 11:03	1
Selenium	ND		0.10		mg/L			09/30/13 11:03	1
Silver	ND		0.050		mg/L			09/30/13 11:03	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Client Sample ID: SP-A7C1-092013
Date Collected: 09/20/13 09:47
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40426-2
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/25/13 11:40	1
Percent Moisture	12		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,1-Trichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg			09/25/13 12:19	1
1,1,2-Trichloroethane	ND		12		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethene	ND		20		ug/Kg			09/25/13 12:19	1
1,1-Dichloropropene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg			09/25/13 12:19	1
1,2-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dichloroethane	ND		16		ug/Kg			09/25/13 12:19	1
1,2-Dichloropropane	ND		12		ug/Kg			09/25/13 12:19	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,4-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
2,2-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
2-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Isopropyltoluene	ND		40		ug/Kg			09/25/13 12:19	1
Acetone	ND		400		ug/Kg			09/25/13 12:19	1
Benzene	ND		16		ug/Kg			09/25/13 12:19	1
Bromobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Bromoform	ND		40		ug/Kg			09/25/13 12:19	1
Bromomethane	ND		140		ug/Kg			09/25/13 12:19	1
Carbon tetrachloride	ND		20		ug/Kg			09/25/13 12:19	1
Chlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Chlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Chlorodibromomethane	ND		20		ug/Kg			09/25/13 12:19	1
Chloroethane	ND		400		ug/Kg			09/25/13 12:19	1
Chloroform	ND		40		ug/Kg			09/25/13 12:19	1
Chloromethane	ND		400		ug/Kg			09/25/13 12:19	1
cis-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
cis-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Dibromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorodifluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Ethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Ethylene Dibromide	ND		40		ug/Kg			09/25/13 12:19	1
Hexachlorobutadiene	ND		40		ug/Kg			09/25/13 12:19	1
Isopropylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Methyl tert-butyl ether	ND		40		ug/Kg			09/25/13 12:19	1
Methylene Chloride	ND		16		ug/Kg			09/25/13 12:19	1
m-Xylene & p-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
Naphthalene	ND		40		ug/Kg			09/25/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
N-Propylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
o-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
sec-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Styrene	ND		40		ug/Kg			09/25/13 12:19	1
tert-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Tetrachloroethene	ND		20		ug/Kg			09/25/13 12:19	1
Toluene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Trichloroethene	ND		16		ug/Kg			09/25/13 12:19	1
Trichlorofluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Vinyl chloride	ND		8.0		ug/Kg			09/25/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 120*		*09/25/13 12:19*	*1*
Ethylbenzene-d10	*116*		*70 - 120*		*09/25/13 12:19*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*		*09/25/13 12:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/25/13 12:19*	*1*
Trifluorotoluene (Surr)	*102*		*65 - 140*		*09/25/13 12:19*	*1*

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	651		ug/Kg		81	72 - 123
1,1,1-Trichloroethane	800	700		ug/Kg		87	63 - 135
1,1,2,2-Tetrachloroethane	800	755		ug/Kg		94	73 - 125
1,1,2-Trichloroethane	800	772		ug/Kg		96	77 - 124
1,1-Dichloroethane	800	766		ug/Kg		96	70 - 128
1,1-Dichloroethene	800	764		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 123
1,2,3-Trichlorobenzene	800	521		ug/Kg		65	61 - 130
1,2,3-Trichloropropane	800	803		ug/Kg		100	77 - 123
1,2,4-Trichlorobenzene	800	589		ug/Kg		74	61 - 130
1,2,4-Trimethylbenzene	800	762		ug/Kg		95	79 - 124
1,2-Dibromo-3-Chloropropane	800	424		ug/Kg		53	53 - 132
1,2-Dichlorobenzene	800	756		ug/Kg		94	79 - 117
1,2-Dichloroethane	800	674		ug/Kg		84	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	754		ug/Kg		94	80 - 125
1,3-Dichlorobenzene	800	758		ug/Kg		95	79 - 119
1,3-Dichloropropane	800	786		ug/Kg		98	77 - 123
1,4-Dichlorobenzene	800	745		ug/Kg		93	79 - 117
2,2-Dichloropropane	800	711		ug/Kg		89	56 - 144
2-Chlorotoluene	800	778		ug/Kg		97	79 - 122
4-Chlorotoluene	800	821		ug/Kg		103	80 - 122

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	731		ug/Kg		91	78 - 126
Acetone	3200	2340		ug/Kg		73	20 - 160
Benzene	800	971		ug/Kg		121	70 - 128
Bromobenzene	800	793		ug/Kg		99	80 - 120
Bromoform	800	491		ug/Kg		61	50 - 124
Bromomethane	800	950		ug/Kg		119	57 - 148
Carbon tetrachloride	800	693		ug/Kg		87	59 - 145
Chlorobenzene	800	809		ug/Kg		101	75 - 120
Chlorobromomethane	800	741		ug/Kg		93	78 - 123
Chlorodibromomethane	800	609		ug/Kg		76	69 - 129
Chloroethane	800	839		ug/Kg		105	48 - 167
Chloroform	800	775		ug/Kg		97	78 - 125
Chloromethane	800	696		ug/Kg		87	55 - 136
cis-1,2-Dichloroethene	800	772		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	800	693		ug/Kg		87	69 - 129
Dibromomethane	800	793		ug/Kg		99	78 - 126
Dichlorobromomethane	800	580		ug/Kg		73	58 - 133
Dichlorodifluoromethane	800	700		ug/Kg		88	38 - 150
Ethylbenzene	800	814		ug/Kg		102	78 - 126
Ethylene Dibromide	800	803		ug/Kg		100	69 - 126
Hexachlorobutadiene	800	723		ug/Kg		90	68 - 134
Isopropylbenzene	800	804		ug/Kg		100	79 - 127
Methyl tert-butyl ether	800	690		ug/Kg		86	65 - 125
Methylene Chloride	800	770		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	829		ug/Kg		104	78 - 126
Naphthalene	800	577		ug/Kg		72	14 - 170
n-Butylbenzene	800	659		ug/Kg		82	78 - 128
N-Propylbenzene	800	772		ug/Kg		96	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	722		ug/Kg		90	78 - 128
Styrene	800	850		ug/Kg		106	79 - 127
tert-Butylbenzene	800	764		ug/Kg		95	71 - 136
Tetrachloroethene	800	840		ug/Kg		105	56 - 150
Toluene	800	817		ug/Kg		102	75 - 126
trans-1,2-Dichloroethene	800	768		ug/Kg		96	76 - 131
trans-1,3-Dichloropropene	800	664		ug/Kg		83	72 - 129
Trichloroethene	800	807		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	701		ug/Kg		88	47 - 165
Vinyl chloride	800	741		ug/Kg		93	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*99*		*70 - 120*
Fluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	800	667		ug/Kg		83	72 - 123	2	20
1,1,1-Trichloroethane	800	715		ug/Kg		89	63 - 135	2	20
1,1,2,2-Tetrachloroethane	800	783		ug/Kg		98	73 - 125	4	22
1,1,2-Trichloroethane	800	780		ug/Kg		97	77 - 124	1	18
1,1-Dichloroethane	800	800		ug/Kg		100	70 - 128	4	21
1,1-Dichloroethene	800	744		ug/Kg		93	70 - 133	3	23
1,1-Dichloropropene	800	815		ug/Kg		102	77 - 123	0	16
1,2,3-Trichlorobenzene	800	544		ug/Kg		68	61 - 130	4	23
1,2,3-Trichloropropane	800	807		ug/Kg		101	77 - 123	1	23
1,2,4-Trichlorobenzene	800	618		ug/Kg		77	61 - 130	5	22
1,2,4-Trimethylbenzene	800	761		ug/Kg		95	79 - 124	0	18
1,2-Dibromo-3-Chloropropane	800	465		ug/Kg		58	53 - 132	9	27
1,2-Dichlorobenzene	800	743		ug/Kg		93	79 - 117	2	17
1,2-Dichloroethane	800	758		ug/Kg		95	71 - 128	12	18
1,2-Dichloropropane	800	1010		ug/Kg		126	76 - 161	4	15
1,3,5-Trimethylbenzene	800	759		ug/Kg		95	80 - 125	1	18
1,3-Dichlorobenzene	800	759		ug/Kg		95	79 - 119	0	17
1,3-Dichloropropane	800	808		ug/Kg		101	77 - 123	3	19
1,4-Dichlorobenzene	800	747		ug/Kg		93	79 - 117	0	18
2,2-Dichloropropane	800	717		ug/Kg		90	56 - 144	1	21
2-Chlorotoluene	800	808		ug/Kg		101	79 - 122	4	18
4-Chlorotoluene	800	786		ug/Kg		98	80 - 122	4	18
4-Isopropyltoluene	800	711		ug/Kg		89	78 - 126	3	18
Acetone	3200	2660		ug/Kg		83	20 - 160	13	30
Benzene	800	783	*	ug/Kg		98	70 - 128	21	19
Bromobenzene	800	815		ug/Kg		102	80 - 120	3	19
Bromoform	800	525		ug/Kg		66	50 - 124	7	25
Bromomethane	800	958		ug/Kg		120	57 - 148	1	29
Carbon tetrachloride	800	723		ug/Kg		90	59 - 145	4	19
Chlorobenzene	800	809		ug/Kg		101	75 - 120	0	21
Chlorobromomethane	800	814		ug/Kg		102	78 - 123	9	19
Chlorodibromomethane	800	616		ug/Kg		77	69 - 129	1	23
Chloroethane	800	931		ug/Kg		116	48 - 167	10	53
Chloroform	800	788		ug/Kg		98	78 - 125	2	17
Chloromethane	800	751		ug/Kg		94	55 - 136	8	26
cis-1,2-Dichloroethene	800	797		ug/Kg		100	70 - 130	3	19
cis-1,3-Dichloropropene	800	677		ug/Kg		85	69 - 129	2	19
Dibromomethane	800	788		ug/Kg		98	78 - 126	1	18
Dichlorobromomethane	800	587		ug/Kg		73	58 - 133	1	19
Dichlorodifluoromethane	800	729		ug/Kg		91	38 - 150	4	26
Ethylbenzene	800	823		ug/Kg		103	78 - 126	1	23
Ethylene Dibromide	800	838		ug/Kg		105	69 - 126	4	21
Hexachlorobutadiene	800	698		ug/Kg		87	68 - 134	4	21
Isopropylbenzene	800	783		ug/Kg		98	79 - 127	3	20
Methyl tert-butyl ether	800	744		ug/Kg		93	65 - 125	8	30
Methylene Chloride	800	773		ug/Kg		97	57 - 146	0	21
m-Xylene & p-Xylene	800	838		ug/Kg		105	78 - 126	1	23
Naphthalene	800	632		ug/Kg		79	14 - 170	9	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			800	659		ug/Kg		82	78 - 128	0	17
N-Propylbenzene			800	764		ug/Kg		95	81 - 127	1	20
o-Xylene			800	800		ug/Kg		100	77 - 127	0	22
sec-Butylbenzene			800	724		ug/Kg		90	78 - 128	0	17
Styrene			800	846		ug/Kg		106	79 - 127	1	21
tert-Butylbenzene			800	755		ug/Kg		94	71 - 136	1	27
Tetrachloroethene			800	815		ug/Kg		102	56 - 150	3	27
Toluene			800	807		ug/Kg		101	75 - 126	1	19
trans-1,2-Dichloroethene			800	789		ug/Kg		99	76 - 131	3	18
trans-1,3-Dichloropropene			800	683		ug/Kg		85	72 - 129	3	20
Trichloroethene			800	811		ug/Kg		101	83 - 124	0	17
Trichlorofluoromethane			800	690		ug/Kg		86	47 - 165	2	54
Vinyl chloride			800	754		ug/Kg		94	67 - 131	2	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*
Ethylbenzene-d10	*100*		*70 - 120*
Fluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*65 - 140*

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg			09/29/13 01:03	1
2-Chlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,3-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
1,4-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Benzyl alcohol	ND		100		ug/Kg			09/29/13 01:03	1
1,2-Dichlorobenzene	ND		55		ug/Kg			09/29/13 01:03	1
2-Methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
3 & 4 Methylphenol	ND		200		ug/Kg			09/29/13 01:03	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg			09/29/13 01:03	1
Hexachloroethane	ND		100		ug/Kg			09/29/13 01:03	1
Nitrobenzene	ND		100		ug/Kg			09/29/13 01:03	1
Isophorone	ND		100		ug/Kg			09/29/13 01:03	1
2-Nitrophenol	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dimethylphenol	ND		100		ug/Kg			09/29/13 01:03	1
Benzoic acid	ND		2500		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Naphthalene	ND		20		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobutadiene	ND		50		ug/Kg			09/29/13 01:03	1
4-Chloro-3-methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Methylnaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
Hexachlorocyclopentadiene	ND		100		ug/Kg			09/29/13 01:03	1
2,4,6-Trichlorophenol	ND		150		ug/Kg			09/29/13 01:03	1
2,4,5-Trichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Chloronaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
2-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Dimethyl phthalate	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthylene	ND		20		ug/Kg			09/29/13 01:03	1
2,6-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
3-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthene	ND		20		ug/Kg			09/29/13 01:03	1
2,4-Dinitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
4-Nitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
Dibenzofuran	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
Diethyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Fluorene	ND		20		ug/Kg			09/29/13 01:03	1
4-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg			09/29/13 01:03	1
N-Nitrosodiphenylamine	ND		50		ug/Kg			09/29/13 01:03	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Pentachlorophenol	ND		200		ug/Kg			09/29/13 01:03	1
Phenanthrene	ND		20		ug/Kg			09/29/13 01:03	1
Anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Di-n-butyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Pyrene	ND		20		ug/Kg			09/29/13 01:03	1
Butyl benzyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg			09/29/13 01:03	1
Benzo[a]anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Chrysene	ND		25		ug/Kg			09/29/13 01:03	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg			09/29/13 01:03	1
Di-n-octyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Benzo[a]pyrene	ND		30		ug/Kg			09/29/13 01:03	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg			09/29/13 01:03	1
Dibenz(a,h)anthracene	ND		40		ug/Kg			09/29/13 01:03	1
Benzo[g,h,i]perylene	ND		25		ug/Kg			09/29/13 01:03	1
Carbazole	ND		100		ug/Kg			09/29/13 01:03	1
1-Methylnaphthalene	ND		30		ug/Kg			09/29/13 01:03	1
Benzo[b]fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Benzo[k]fluoranthene	ND		25		ug/Kg			09/29/13 01:03	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		36 - 145		09/29/13 01:03	1
Phenol-d5	106		38 - 149		09/29/13 01:03	1
Nitrobenzene-d5	102		38 - 141		09/29/13 01:03	1
2-Fluorobiphenyl	96		42 - 140		09/29/13 01:03	1
2,4,6-Tribromophenol	72		28 - 143		09/29/13 01:03	1
Terphenyl-d14	113		42 - 151		09/29/13 01:03	1

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1240		ug/Kg		124	66 - 126
Bis(2-chloroethyl)ether	998	970		ug/Kg		97	57 - 122
2-Chlorophenol	1000	1280	*	ug/Kg		128	65 - 125
1,3-Dichlorobenzene	1000	1020		ug/Kg		102	64 - 124
1,4-Dichlorobenzene	1010	1030		ug/Kg		102	62 - 132
Benzyl alcohol	997	1080		ug/Kg		108	42 - 147
1,2-Dichlorobenzene	1010	1000		ug/Kg		99	68 - 118
2-Methylphenol	997	1030		ug/Kg		103	56 - 121
3 & 4 Methylphenol	1000	1110		ug/Kg		111	61 - 126
N-Nitrosodi-n-propylamine	1000	995		ug/Kg		99	52 - 127
Hexachloroethane	1010	1040		ug/Kg		102	56 - 131
Nitrobenzene	1020	1110		ug/Kg		109	59 - 134
Isophorone	988	1190	*	ug/Kg		121	53 - 118
2-Nitrophenol	1010	1320	*	ug/Kg		131	58 - 128
2,4-Dimethylphenol	1010	1540	*	ug/Kg		153	58 - 133
Benzoic acid	5090	5490		ug/Kg		108	10 - 130
Bis(2-chloroethoxy)methane	998	1030		ug/Kg		103	63 - 128
2,4-Dichlorophenol	1020	1330	*	ug/Kg		131	59 - 124
1,2,4-Trichlorobenzene	1000	1010		ug/Kg		101	63 - 128
Naphthalene	1010	991		ug/Kg		98	64 - 129
4-Chloroaniline	983	627		ug/Kg		64	20 - 181
Hexachlorobutadiene	1000	1010		ug/Kg		101	59 - 134
4-Chloro-3-methylphenol	1010	1210		ug/Kg		120	58 - 128
2-Methylnaphthalene	991	1010		ug/Kg		102	65 - 125
Hexachlorocyclopentadiene	1000	797		ug/Kg		80	30 - 132
2,4,6-Trichlorophenol	1010	1120		ug/Kg		111	66 - 131
2,4,5-Trichlorophenol	1010	1050		ug/Kg		104	64 - 124
2-Chloronaphthalene	1000	1010		ug/Kg		101	69 - 129
2-Nitroaniline	983	897		ug/Kg		91	58 - 133
Dimethyl phthalate	1000	1130		ug/Kg		112	65 - 125
Acenaphthylene	1000	1090		ug/Kg		109	69 - 129
2,6-Dinitrotoluene	1000	993		ug/Kg		99	65 - 125
3-Nitroaniline	987	524	*	ug/Kg		53	80 - 165
Acenaphthene	1000	974		ug/Kg		97	65 - 130
2,4-Dinitrophenol	5060	4260		ug/Kg		84	53 - 168
4-Nitrophenol	5030	4670		ug/Kg		93	47 - 172

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

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	1010	1000		ug/Kg		100	70 - 125
2,4-Dinitrotoluene	1000	1050		ug/Kg		105	57 - 122
Diethyl phthalate	1000	1040		ug/Kg		104	64 - 129
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130
Fluorene	1010	1050		ug/Kg		104	68 - 128
4-Nitroaniline	991	686	*	ug/Kg		69	70 - 150
4,6-Dinitro-2-methylphenol	5060	5330		ug/Kg		105	38 - 143
N-Nitrosodiphenylamine	1000	1180		ug/Kg		118	88 - 153
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134
Hexachlorobenzene	1000	1030		ug/Kg		103	61 - 136
Pentachlorophenol	1000	1140		ug/Kg		114	29 - 124
Phenanthrene	1000	962		ug/Kg		96	65 - 125
Anthracene	1010	1030		ug/Kg		102	73 - 123
Di-n-butyl phthalate	1000	1060		ug/Kg		106	69 - 124
Fluoranthene	1000	1070		ug/Kg		107	61 - 121
Pyrene	998	1030		ug/Kg		103	54 - 134
Butyl benzyl phthalate	1000	1080		ug/Kg		107	65 - 140
3,3'-Dichlorobenzidine	1980	1420	*	ug/Kg		71	73 - 163
Benzo[a]anthracene	1000	1020		ug/Kg		102	64 - 124
Chrysene	992	962		ug/Kg		97	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1100		ug/Kg		110	64 - 144
Di-n-octyl phthalate	1010	986		ug/Kg		98	58 - 148
Benzo[a]pyrene	1000	1040		ug/Kg		104	68 - 128
Indeno[1,2,3-cd]pyrene	998	879		ug/Kg		88	59 - 139
Dibenz(a,h)anthracene	1000	992		ug/Kg		99	57 - 142
Benzo[g,h,i]perylene	1010	1080		ug/Kg		107	57 - 142
Carbazole	1010	1060		ug/Kg		105	88 - 158
1-Methylnaphthalene	997	1040		ug/Kg		105	48 - 148
Benzo[b]fluoranthene	1000	1100		ug/Kg		110	66 - 136
Benzo[k]fluoranthene	1010	1060		ug/Kg		105	63 - 143
bis (2-chloroisopropyl) ether	993	815		ug/Kg		82	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*113*		*36 - 145*
Phenol-d5	*108*		*38 - 149*
Nitrobenzene-d5	*104*		*38 - 141*
2-Fluorobiphenyl	*97*		*42 - 140*
2,4,6-Tribromophenol	*99*		*28 - 143*
Terphenyl-d14	*110*		*42 - 151*

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1200		ug/Kg		120	66 - 126	3	26
Bis(2-chloroethyl)ether	998	943		ug/Kg		95	57 - 122	3	60
2-Chlorophenol	1000	1220		ug/Kg		121	65 - 125	5	27

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1000	996		ug/Kg		99	64 - 124	2	60
1,4-Dichlorobenzene	1010	1010		ug/Kg		99	62 - 132	3	32
Benzyl alcohol	997	1040		ug/Kg		104	42 - 147	4	60
1,2-Dichlorobenzene	1010	978		ug/Kg		97	68 - 118	2	60
2-Methylphenol	997	985		ug/Kg		99	56 - 121	4	25
3 & 4 Methylphenol	1000	1080		ug/Kg		108	61 - 126	3	27
N-Nitrosodi-n-propylamine	1000	984		ug/Kg		98	52 - 127	1	28
Hexachloroethane	1010	963		ug/Kg		95	56 - 131	7	60
Nitrobenzene	1020	1100		ug/Kg		108	59 - 134	1	60
Isophorone	988	1170		ug/Kg		118	53 - 118	2	60
2-Nitrophenol	1010	1290		ug/Kg		128	58 - 128	2	60
2,4-Dimethylphenol	1010	1470	*	ug/Kg		146	58 - 133	5	60
Benzoic acid	5090	5140		ug/Kg		101	10 - 130	7	60
Bis(2-chloroethoxy)methane	998	996		ug/Kg		100	63 - 128	3	60
2,4-Dichlorophenol	1020	1280	*	ug/Kg		126	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	994		ug/Kg		99	63 - 128	1	28
Naphthalene	1010	971		ug/Kg		96	64 - 129	2	26
4-Chloroaniline	983	553		ug/Kg		56	20 - 181	12	60
Hexachlorobutadiene	1000	999		ug/Kg		100	59 - 134	1	60
4-Chloro-3-methylphenol	1010	1200		ug/Kg		119	58 - 128	1	27
2-Methylnaphthalene	991	966		ug/Kg		97	65 - 125	4	27
Hexachlorocyclopentadiene	1000	802		ug/Kg		80	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1120		ug/Kg		110	66 - 131	0	60
2,4,5-Trichlorophenol	1010	994		ug/Kg		98	64 - 124	6	60
2-Chloronaphthalene	1000	985		ug/Kg		98	69 - 129	2	25
2-Nitroaniline	983	891		ug/Kg		91	58 - 133	1	60
Dimethyl phthalate	1000	1090		ug/Kg		109	65 - 125	3	60
Acenaphthylene	1000	1040		ug/Kg		104	69 - 129	4	28
2,6-Dinitrotoluene	1000	995		ug/Kg		99	65 - 125	0	60
3-Nitroaniline	987	509	*	ug/Kg		52	80 - 165	3	60
Acenaphthene	1000	956		ug/Kg		95	65 - 130	2	27
2,4-Dinitrophenol	5060	4020		ug/Kg		79	53 - 168	6	60
4-Nitrophenol	5030	4730		ug/Kg		94	47 - 172	1	33
Dibenzofuran	1010	1010		ug/Kg		100	70 - 125	1	60
2,4-Dinitrotoluene	1000	1070		ug/Kg		107	57 - 122	2	31
Diethyl phthalate	1000	1030		ug/Kg		103	64 - 129	1	26
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130	0	60
Fluorene	1010	1030		ug/Kg		102	68 - 128	2	31
4-Nitroaniline	991	755		ug/Kg		76	70 - 150	10	60
4,6-Dinitro-2-methylphenol	5060	5130		ug/Kg		101	38 - 143	4	60
N-Nitrosodiphenylamine	1000	1170		ug/Kg		117	88 - 153	0	60
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134	0	60
Hexachlorobenzene	1000	1050		ug/Kg		104	61 - 136	2	60
Pentachlorophenol	1000	1120		ug/Kg		112	29 - 124	2	68
Phenanthrene	1000	951		ug/Kg		95	65 - 125	1	28
Anthracene	1010	1020		ug/Kg		102	73 - 123	0	27
Di-n-butyl phthalate	1000	1050		ug/Kg		105	69 - 124	1	60
Fluoranthene	1000	1070		ug/Kg		107	61 - 121	0	36

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene	998	1010		ug/Kg		102	54 - 134	2	31
Butyl benzyl phthalate	1000	1040		ug/Kg		104	65 - 140	3	60
3,3'-Dichlorobenzidine	1980	1300	*	ug/Kg		66	73 - 163	8	60
Benzo[a]anthracene	1000	987		ug/Kg		98	64 - 124	3	27
Chrysene	992	942		ug/Kg		95	71 - 126	2	26
Bis(2-ethylhexyl) phthalate	1000	1060		ug/Kg		106	64 - 144	4	60
Di-n-octyl phthalate	1010	972		ug/Kg		97	58 - 148	1	31
Benzo[a]pyrene	1000	1000		ug/Kg		100	68 - 128	3	30
Indeno[1,2,3-cd]pyrene	998	823		ug/Kg		82	59 - 139	7	29
Dibenz(a,h)anthracene	1000	902		ug/Kg		90	57 - 142	10	30
Benzo[g,h,i]perylene	1010	1040		ug/Kg		103	57 - 142	4	28
Carbazole	1010	1040		ug/Kg		103	88 - 158	2	60
1-Methylnaphthalene	997	1010		ug/Kg		101	48 - 148	3	30
Benzo[b]fluoranthene	1000	1090		ug/Kg		108	66 - 136	1	31
Benzo[k]fluoranthene	1010	1080		ug/Kg		108	63 - 143	2	31
bis (2-chloroisopropyl) ether	993	759		ug/Kg		76	44 - 140	7	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*104*		*36 - 145*
Phenol-d5	*101*		*38 - 149*
Nitrobenzene-d5	*101*		*38 - 141*
2-Fluorobiphenyl	*93*		*42 - 140*
2,4,6-Tribromophenol	*95*		*28 - 143*
Terphenyl-d14	*105*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg			09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*		*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*		*09/26/13 18:50*	*1*

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

Lab Sample ID: LCS 580-145585/2-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-145876/1-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:19	1
Barium	ND		0.010		mg/L			09/30/13 10:19	1
Cadmium	ND		0.010		mg/L			09/30/13 10:19	1
Chromium	ND		0.025		mg/L			09/30/13 10:19	1
Lead	ND		0.030		mg/L			09/30/13 10:19	1
Selenium	ND		0.10		mg/L			09/30/13 10:19	1
Silver	ND		0.050		mg/L			09/30/13 10:19	1

Lab Sample ID: LCS 580-145876/2-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			4.00	4.19		mg/L		105	80 - 120		
Barium			4.00	3.99		mg/L		100	80 - 120		
Cadmium			0.100	0.103		mg/L		103	80 - 120		
Chromium			0.400	0.401		mg/L		100	80 - 120		
Lead			1.00	0.980		mg/L		98	80 - 120		
Selenium			4.00	4.26		mg/L		107	80 - 120		
Silver			0.600	0.573		mg/L		95	80 - 120		

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

Lab Sample ID: LCSD 580-145876/3-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic			4.00	4.28		mg/L		107	80 - 120	2	20
Barium			4.00	4.01		mg/L		100	80 - 120	1	20
Cadmium			0.100	0.104		mg/L		104	80 - 120	1	20
Chromium			0.400	0.408		mg/L		102	80 - 120	2	20
Lead			1.00	1.01		mg/L		101	80 - 120	3	20
Selenium			4.00	4.34		mg/L		109	80 - 120	2	20
Silver			0.600	0.591		mg/L		99	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-145876/1-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:33	1

Lab Sample ID: LCS 580-145876/2-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.0200	0.0171		mg/L		85	80 - 120		

Lab Sample ID: LCSD 580-145876/3-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.0200	0.0168		mg/L		84	80 - 120	2	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40426-1

Client Sample ID: SP-A7C2-092013

Lab Sample ID: 580-40426-1

Date Collected: 09/20/13 09:40
Matrix: Solid
Date Received: 09/21/13 10:30
Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	145776	09/25/13 19:46	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	JJP	TAL SEA

Client Sample ID: SP-A7C1-092013

Lab Sample ID: 580-40426-2

Date Collected: 09/20/13 09:47
Matrix: Solid
Date Received: 09/21/13 10:30
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	146067	09/29/13 07:06	CGM	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 21:44	SGH	TAL SEA
TCLP	Analysis	7470A		1	146027	09/27/13 14:55	PAB	TAL SEA
TCLP	Analysis	6010B		1	146143	09/30/13 11:03	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	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

TestAmerica Job ID: 580-40426-1

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: 580-40426-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40426-1	SP-A7C2-092013	Solid	09/20/13 09:40	09/21/13 10:30
580-40426-2	SP-A7C1-092013	Solid	09/20/13 09:47	09/21/13 10:30

BNSF RAILWAY

CHAIN OF CUSTODY

LAB WORK ORDER: 40426

LABORATORY INFORMATION

Laboratory: TEST AMERICA | Project Manager: KRIS ALLEN
Address: 5755 8TH STREET EAST | Phone:
City/State/ZIP: TACOMA, WA 98424 | Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 1396110.04
BNSF Project Name: PARKWATER
BNSF Contact: BRUCE SHEPPARD
Project State of Origin: WA
Project City: SPOKANE
BNSF Work Order No.: TTO101-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Address: 32001 32ND AVE S, SUITE 100
City/State/ZIP: FEDERAL WAY, WA 98001
Phone: 253-835-6400 Fax: 253-952-3435
Project Number: 1396110.04
Project Manager: HOWARD YOUNG
Email: howardyoung@kennedyjenks.com

TURNAROUND TIME

☐ 1-day Rush ☐ 5- to 8-day Rush
☐ 2-day Rush ☐ Standard 10-Day
☒ 3-day Rush ☒ Other SEE COMMENTS

DELIVERABLES

☐ BNSF Standard (Level II)
☐ Level III
☐ Level IV
☒ Other Deliverables? K/J Custom EDD
☒ EDD Req. Format?

SAMPLE INFORMATION

	Sample Identification	Containers	Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS (SW1311/6010)	SEMI VOLATILE ORGANICS (8270)	PCBS (SW8082)	VOLATILE ORGANIC COMPOUNDS (8260)					COMMENTS	LAB USE
1	SP-A7C2-092013	1	9/20/13	0940	DR	NA	G	S				X						1
2	SP-A7C1-092013	2	9/20/13	0947	DR	NA	C	S	X	X	X							2
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Cooler/TB Dig/IR cor 1.7 unc 1.8
Cooler Dsc Og blue/white @ Lab
Wet/Packs Packing bubble
W/CS. fedex SO

Cooler/TB Dig/IR cor 2.7 unc 1.3
Cooler Dsc Og blue/white @ Lab
Wet/Packs Packing bubble
W/CS. fedex SO

580-40426 Chain of Custody

Relinquished By:	Date/Time:	Received By:	Date/Time:
Howard Young	9/20/13 15:30	[signature]	9/20/13 1430
[signature]	9/20/13 1500	[signature]	9/21/13 1030
Received by Laboratory:	Date/Time:	Lab Remarks:	Lab: Custody Intact? ☐ Yes ☐ No

Comments and Special Analytical Requirements:
TCLP METALS - 3 DAY RUSH (24 HR)
VOCs, SVOCs, PCBs - 3 DAY RUSH

Custody Seal No.: | BNSF COC No.:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES DUPLICATE - CONSULTANT TAL-1001 (06/08)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40426-1

Login Number: 40426

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.	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: 580-40421-1
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:
10/1/2013 1:52:12 PM

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

Table of Contents

Job ID: 580-40421-1

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 2.3º C and 4.7º C.

Except:

The following samples to be analyzed by method 8260 were received and analyzed from an unpreserved bulk soil jar: SP-A7D2-092013 (580-40421-2).

GC/MS VOA - Method(s) 8260B
The following sample(s) was prepared outside of preparation holding time: SP-A7D2-092013 (580-40421-2); they were received as bulk soil more than 48 hours after sampling.

The RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 145776 recovered outside control limits for the following analytes: Benzene. The individual recoveries met the acceptance limit. No further action was taken on this outlier.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C
The recovery of the LCS and LCSD is outside of recovery limits for several compounds. The samples will be re-extracted and re-analysed. The data from the original extraction has been qualified and reported.

No other analytical or quality issues were noted.

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.

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Client Sample ID: SP-A7D1-092013
Date Collected: 09/20/13 09:00
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40421-1
Matrix: Solid
Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		110		ug/Kg	☼		09/29/13 05:29	1
Bis(2-chloroethyl)ether	ND		110		ug/Kg	☼		09/29/13 05:29	1
2-Chlorophenol	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
1,3-Dichlorobenzene	ND		55		ug/Kg	☼		09/29/13 05:29	1
1,4-Dichlorobenzene	ND		55		ug/Kg	☼		09/29/13 05:29	1
Benzyl alcohol	ND		110		ug/Kg	☼		09/29/13 05:29	1
1,2-Dichlorobenzene	ND		60		ug/Kg	☼		09/29/13 05:29	1
2-Methylphenol	ND		110		ug/Kg	☼		09/29/13 05:29	1
3 & 4 Methylphenol	ND		220		ug/Kg	☼		09/29/13 05:29	1
N-Nitrosodi-n-propylamine	ND		110		ug/Kg	☼		09/29/13 05:29	1
Hexachloroethane	ND		110		ug/Kg	☼		09/29/13 05:29	1
Nitrobenzene	ND		110		ug/Kg	☼		09/29/13 05:29	1
Isophorone	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
2-Nitrophenol	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
2,4-Dimethylphenol	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
Benzoic acid	ND		2700		ug/Kg	☼		09/29/13 05:29	1
Bis(2-chloroethoxy)methane	ND		110		ug/Kg	☼		09/29/13 05:29	1
2,4-Dichlorophenol	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
1,2,4-Trichlorobenzene	ND		55		ug/Kg	☼		09/29/13 05:29	1
Naphthalene	**120**		22		ug/Kg	☼		09/29/13 05:29	1
4-Chloroaniline	ND		110		ug/Kg	☼		09/29/13 05:29	1
Hexachlorobutadiene	ND		55		ug/Kg	☼		09/29/13 05:29	1
4-Chloro-3-methylphenol	ND		110		ug/Kg	☼		09/29/13 05:29	1
2-Methylnaphthalene	**170**		22		ug/Kg	☼		09/29/13 05:29	1
Hexachlorocyclopentadiene	ND		110		ug/Kg	☼		09/29/13 05:29	1
2,4,6-Trichlorophenol	ND		160		ug/Kg	☼		09/29/13 05:29	1
2,4,5-Trichlorophenol	ND		110		ug/Kg	☼		09/29/13 05:29	1
2-Chloronaphthalene	ND		22		ug/Kg	☼		09/29/13 05:29	1
2-Nitroaniline	ND		110		ug/Kg	☼		09/29/13 05:29	1
Dimethyl phthalate	ND		110		ug/Kg	☼		09/29/13 05:29	1
Acenaphthylene	**49**		22		ug/Kg	☼		09/29/13 05:29	1
2,6-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 05:29	1
3-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
Acenaphthene	**100**		22		ug/Kg	☼		09/29/13 05:29	1
2,4-Dinitrophenol	ND		1100		ug/Kg	☼		09/29/13 05:29	1
4-Nitrophenol	ND		1100		ug/Kg	☼		09/29/13 05:29	1
Dibenzofuran	ND		110		ug/Kg	☼		09/29/13 05:29	1
2,4-Dinitrotoluene	ND		110		ug/Kg	☼		09/29/13 05:29	1
Diethyl phthalate	ND		220		ug/Kg	☼		09/29/13 05:29	1
4-Chlorophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 05:29	1
Fluorene	**97**		22		ug/Kg	☼		09/29/13 05:29	1
4-Nitroaniline	ND	*	110		ug/Kg	☼		09/29/13 05:29	1
4,6-Dinitro-2-methylphenol	ND		1100		ug/Kg	☼		09/29/13 05:29	1
N-Nitrosodiphenylamine	ND		55		ug/Kg	☼		09/29/13 05:29	1
4-Bromophenyl phenyl ether	ND		110		ug/Kg	☼		09/29/13 05:29	1
Hexachlorobenzene	ND		55		ug/Kg	☼		09/29/13 05:29	1
Pentachlorophenol	ND		220		ug/Kg	☼		09/29/13 05:29	1
Phenanthrene	**1500**		22		ug/Kg	☼		09/29/13 05:29	1
Anthracene	**380**		22		ug/Kg	☼		09/29/13 05:29	1

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Client Sample ID: SP-A7D1-092013
Date Collected: 09/20/13 09:00
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40421-1
Matrix: Solid
Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		550		ug/Kg	☼		09/29/13 05:29	1
Fluoranthene	**3000**		22		ug/Kg	☼		09/29/13 05:29	1
Pyrene	**2800**		22		ug/Kg	☼		09/29/13 05:29	1
Butyl benzyl phthalate	ND		220		ug/Kg	☼		09/29/13 05:29	1
3,3'-Dichlorobenzidine	ND	*	220		ug/Kg	☼		09/29/13 05:29	1
Benzo[a]anthracene	**1700**		22		ug/Kg	☼		09/29/13 05:29	1
Chrysene	**1700**		27		ug/Kg	☼		09/29/13 05:29	1
Bis(2-ethylhexyl) phthalate	ND		660		ug/Kg	☼		09/29/13 05:29	1
Di-n-octyl phthalate	ND		550		ug/Kg	☼		09/29/13 05:29	1
Benzo[a]pyrene	**1800**		33		ug/Kg	☼		09/29/13 05:29	1
Indeno[1,2,3-cd]pyrene	**600**		44		ug/Kg	☼		09/29/13 05:29	1
Dibenz(a,h)anthracene	**180**		44		ug/Kg	☼		09/29/13 05:29	1
Benzo[g,h,i]perylene	**560**		27		ug/Kg	☼		09/29/13 05:29	1
Carbazole	**180**		110		ug/Kg	☼		09/29/13 05:29	1
1-Methylnaphthalene	**120**		33		ug/Kg	☼		09/29/13 05:29	1
Benzo[b]fluoranthene	**3000**		22		ug/Kg	☼		09/29/13 05:29	1
Benzo[k]fluoranthene	**1100**		27		ug/Kg	☼		09/29/13 05:29	1
bis (2-chloroisopropyl) ether	ND		270		ug/Kg	☼		09/29/13 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*93*		*36 - 145*		*09/29/13 05:29*	*1*
Phenol-d5	*90*		*38 - 149*		*09/29/13 05:29*	*1*
Nitrobenzene-d5	*97*		*38 - 141*		*09/29/13 05:29*	*1*
2-Fluorobiphenyl	*84*		*42 - 140*		*09/29/13 05:29*	*1*
2,4,6-Tribromophenol	*83*		*28 - 143*		*09/29/13 05:29*	*1*
Terphenyl-d14	*101*		*42 - 151*		*09/29/13 05:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼		09/26/13 20:18	1
PCB-1221	ND		0.012		mg/Kg	☼		09/26/13 20:18	1
PCB-1232	ND		0.012		mg/Kg	☼		09/26/13 20:18	1
PCB-1242	ND		0.011		mg/Kg	☼		09/26/13 20:18	1
PCB-1248	ND		0.011		mg/Kg	☼		09/26/13 20:18	1
PCB-1254	ND		0.011		mg/Kg	☼		09/26/13 20:18	1
PCB-1260	**0.046**		0.011		mg/Kg	☼		09/26/13 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*45 - 135*		*09/26/13 20:18*	*1*
DCB Decachlorobiphenyl	*88*		*50 - 140*		*09/26/13 20:18*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 11:11	1
Barium	**0.49**		0.010		mg/L			09/30/13 11:11	1
Cadmium	**0.013**		0.010		mg/L			09/30/13 11:11	1
Chromium	ND		0.025		mg/L			09/30/13 11:11	1
Lead	**0.38**		0.030		mg/L			09/30/13 11:11	1
Selenium	ND		0.10		mg/L			09/30/13 11:11	1
Silver	ND		0.050		mg/L			09/30/13 11:11	1

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Client Sample ID: SP-A7D1-092013
Date Collected: 09/20/13 09:00
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40421-1
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88		0.10		%			09/25/13 11:40	1
Percent Moisture	12		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Client Sample ID: SP-A7D2-092013
Date Collected: 09/20/13 09:10
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40421-2
Matrix: Solid
Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,1,1-Trichloroethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼		09/25/13 18:21	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼		09/25/13 18:21	1
1,1-Dichloroethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼		09/25/13 18:21	1
1,1-Dichloropropene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,2,3-Trichlorobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,2,3-Trichloropropane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,2,4-Trichlorobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,2,4-Trimethylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼		09/25/13 18:21	1
1,2-Dichlorobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,2-Dichloroethane	ND	H	18		ug/Kg	☼		09/25/13 18:21	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼		09/25/13 18:21	1
1,3,5-Trimethylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,3-Dichlorobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,3-Dichloropropane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
1,4-Dichlorobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
2,2-Dichloropropane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
2-Chlorotoluene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
4-Chlorotoluene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
4-Isopropyltoluene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Acetone	ND	H	440		ug/Kg	☼		09/25/13 18:21	1
Benzene	ND	H *	18		ug/Kg	☼		09/25/13 18:21	1
Bromobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Bromoform	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Bromomethane	ND	H	160		ug/Kg	☼		09/25/13 18:21	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼		09/25/13 18:21	1
Chlorobenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Chlorobromomethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼		09/25/13 18:21	1
Chloroethane	ND	H	440		ug/Kg	☼		09/25/13 18:21	1
Chloroform	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Chloromethane	ND	H	440		ug/Kg	☼		09/25/13 18:21	1
cis-1,2-Dichloroethene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
cis-1,3-Dichloropropene	ND	H	18		ug/Kg	☼		09/25/13 18:21	1
Dibromomethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Dichlorobromomethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Dichlorodifluoromethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Ethylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Ethylene Dibromide	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Hexachlorobutadiene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Isopropylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Methyl tert-butyl ether	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Methylene Chloride	ND	H	18		ug/Kg	☼		09/25/13 18:21	1
m-Xylene & p-Xylene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Naphthalene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
n-Butylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Client Sample ID: SP-A7D2-092013
Date Collected: 09/20/13 09:10
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40421-2
Matrix: Solid
Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
o-Xylene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
sec-Butylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Styrene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
tert-Butylbenzene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Tetrachloroethene	ND	H	22		ug/Kg	☼		09/25/13 18:21	1
Toluene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
trans-1,2-Dichloroethene	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
trans-1,3-Dichloropropene	ND	H	18		ug/Kg	☼		09/25/13 18:21	1
Trichloroethene	ND	H	18		ug/Kg	☼		09/25/13 18:21	1
Trichlorofluoromethane	ND	H	44		ug/Kg	☼		09/25/13 18:21	1
Vinyl chloride	ND	H	8.9		ug/Kg	☼		09/25/13 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*		*09/25/13 18:21*	*1*
Ethylbenzene-d10	*99*		*70 - 120*		*09/25/13 18:21*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*		*09/25/13 18:21*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/25/13 18:21*	*1*
Trifluorotoluene (Surr)	*94*		*65 - 140*		*09/25/13 18:21*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**85**		0.10		%			09/25/13 11:40	1
Percent Moisture	**15**		0.10		%			09/25/13 11:40	1

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,1-Trichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg			09/25/13 12:19	1
1,1,2-Trichloroethane	ND		12		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethene	ND		20		ug/Kg			09/25/13 12:19	1
1,1-Dichloropropene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg			09/25/13 12:19	1
1,2-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dichloroethane	ND		16		ug/Kg			09/25/13 12:19	1
1,2-Dichloropropane	ND		12		ug/Kg			09/25/13 12:19	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,4-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
2,2-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
2-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Isopropyltoluene	ND		40		ug/Kg			09/25/13 12:19	1
Acetone	ND		400		ug/Kg			09/25/13 12:19	1
Benzene	ND		16		ug/Kg			09/25/13 12:19	1
Bromobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Bromoform	ND		40		ug/Kg			09/25/13 12:19	1
Bromomethane	ND		140		ug/Kg			09/25/13 12:19	1
Carbon tetrachloride	ND		20		ug/Kg			09/25/13 12:19	1
Chlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Chlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Chlorodibromomethane	ND		20		ug/Kg			09/25/13 12:19	1
Chloroethane	ND		400		ug/Kg			09/25/13 12:19	1
Chloroform	ND		40		ug/Kg			09/25/13 12:19	1
Chloromethane	ND		400		ug/Kg			09/25/13 12:19	1
cis-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
cis-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Dibromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorodifluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Ethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Ethylene Dibromide	ND		40		ug/Kg			09/25/13 12:19	1
Hexachlorobutadiene	ND		40		ug/Kg			09/25/13 12:19	1
Isopropylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Methyl tert-butyl ether	ND		40		ug/Kg			09/25/13 12:19	1
Methylene Chloride	ND		16		ug/Kg			09/25/13 12:19	1
m-Xylene & p-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
Naphthalene	ND		40		ug/Kg			09/25/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
N-Propylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
o-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
sec-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Styrene	ND		40		ug/Kg			09/25/13 12:19	1
tert-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Tetrachloroethene	ND		20		ug/Kg			09/25/13 12:19	1
Toluene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Trichloroethene	ND		16		ug/Kg			09/25/13 12:19	1
Trichlorofluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Vinyl chloride	ND		8.0		ug/Kg			09/25/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 120*		*09/25/13 12:19*	*1*
Ethylbenzene-d10	*116*		*70 - 120*		*09/25/13 12:19*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*		*09/25/13 12:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/25/13 12:19*	*1*
Trifluorotoluene (Surr)	*102*		*65 - 140*		*09/25/13 12:19*	*1*

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	651		ug/Kg		81	72 - 123
1,1,1-Trichloroethane	800	700		ug/Kg		87	63 - 135
1,1,2,2-Tetrachloroethane	800	755		ug/Kg		94	73 - 125
1,1,2-Trichloroethane	800	772		ug/Kg		96	77 - 124
1,1-Dichloroethane	800	766		ug/Kg		96	70 - 128
1,1-Dichloroethene	800	764		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 123
1,2,3-Trichlorobenzene	800	521		ug/Kg		65	61 - 130
1,2,3-Trichloropropane	800	803		ug/Kg		100	77 - 123
1,2,4-Trichlorobenzene	800	589		ug/Kg		74	61 - 130
1,2,4-Trimethylbenzene	800	762		ug/Kg		95	79 - 124
1,2-Dibromo-3-Chloropropane	800	424		ug/Kg		53	53 - 132
1,2-Dichlorobenzene	800	756		ug/Kg		94	79 - 117
1,2-Dichloroethane	800	674		ug/Kg		84	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	754		ug/Kg		94	80 - 125
1,3-Dichlorobenzene	800	758		ug/Kg		95	79 - 119
1,3-Dichloropropane	800	786		ug/Kg		98	77 - 123
1,4-Dichlorobenzene	800	745		ug/Kg		93	79 - 117
2,2-Dichloropropane	800	711		ug/Kg		89	56 - 144
2-Chlorotoluene	800	778		ug/Kg		97	79 - 122
4-Chlorotoluene	800	821		ug/Kg		103	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	731		ug/Kg		91	78 - 126
Acetone	3200	2340		ug/Kg		73	20 - 160
Benzene	800	971		ug/Kg		121	70 - 128
Bromobenzene	800	793		ug/Kg		99	80 - 120
Bromoform	800	491		ug/Kg		61	50 - 124
Bromomethane	800	950		ug/Kg		119	57 - 148
Carbon tetrachloride	800	693		ug/Kg		87	59 - 145
Chlorobenzene	800	809		ug/Kg		101	75 - 120
Chlorobromomethane	800	741		ug/Kg		93	78 - 123
Chlorodibromomethane	800	609		ug/Kg		76	69 - 129
Chloroethane	800	839		ug/Kg		105	48 - 167
Chloroform	800	775		ug/Kg		97	78 - 125
Chloromethane	800	696		ug/Kg		87	55 - 136
cis-1,2-Dichloroethene	800	772		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	800	693		ug/Kg		87	69 - 129
Dibromomethane	800	793		ug/Kg		99	78 - 126
Dichlorobromomethane	800	580		ug/Kg		73	58 - 133
Dichlorodifluoromethane	800	700		ug/Kg		88	38 - 150
Ethylbenzene	800	814		ug/Kg		102	78 - 126
Ethylene Dibromide	800	803		ug/Kg		100	69 - 126
Hexachlorobutadiene	800	723		ug/Kg		90	68 - 134
Isopropylbenzene	800	804		ug/Kg		100	79 - 127
Methyl tert-butyl ether	800	690		ug/Kg		86	65 - 125
Methylene Chloride	800	770		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	829		ug/Kg		104	78 - 126
Naphthalene	800	577		ug/Kg		72	14 - 170
n-Butylbenzene	800	659		ug/Kg		82	78 - 128
N-Propylbenzene	800	772		ug/Kg		96	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	722		ug/Kg		90	78 - 128
Styrene	800	850		ug/Kg		106	79 - 127
tert-Butylbenzene	800	764		ug/Kg		95	71 - 136
Tetrachloroethene	800	840		ug/Kg		105	56 - 150
Toluene	800	817		ug/Kg		102	75 - 126
trans-1,2-Dichloroethene	800	768		ug/Kg		96	76 - 131
trans-1,3-Dichloropropene	800	664		ug/Kg		83	72 - 129
Trichloroethene	800	807		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	701		ug/Kg		88	47 - 165
Vinyl chloride	800	741		ug/Kg		93	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*99*		*70 - 120*
Fluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	800	667		ug/Kg		83	72 - 123	2	20
1,1,1-Trichloroethane	800	715		ug/Kg		89	63 - 135	2	20
1,1,2,2-Tetrachloroethane	800	783		ug/Kg		98	73 - 125	4	22
1,1,2-Trichloroethane	800	780		ug/Kg		97	77 - 124	1	18
1,1-Dichloroethane	800	800		ug/Kg		100	70 - 128	4	21
1,1-Dichloroethene	800	744		ug/Kg		93	70 - 133	3	23
1,1-Dichloropropene	800	815		ug/Kg		102	77 - 123	0	16
1,2,3-Trichlorobenzene	800	544		ug/Kg		68	61 - 130	4	23
1,2,3-Trichloropropane	800	807		ug/Kg		101	77 - 123	1	23
1,2,4-Trichlorobenzene	800	618		ug/Kg		77	61 - 130	5	22
1,2,4-Trimethylbenzene	800	761		ug/Kg		95	79 - 124	0	18
1,2-Dibromo-3-Chloropropane	800	465		ug/Kg		58	53 - 132	9	27
1,2-Dichlorobenzene	800	743		ug/Kg		93	79 - 117	2	17
1,2-Dichloroethane	800	758		ug/Kg		95	71 - 128	12	18
1,2-Dichloropropane	800	1010		ug/Kg		126	76 - 161	4	15
1,3,5-Trimethylbenzene	800	759		ug/Kg		95	80 - 125	1	18
1,3-Dichlorobenzene	800	759		ug/Kg		95	79 - 119	0	17
1,3-Dichloropropane	800	808		ug/Kg		101	77 - 123	3	19
1,4-Dichlorobenzene	800	747		ug/Kg		93	79 - 117	0	18
2,2-Dichloropropane	800	717		ug/Kg		90	56 - 144	1	21
2-Chlorotoluene	800	808		ug/Kg		101	79 - 122	4	18
4-Chlorotoluene	800	786		ug/Kg		98	80 - 122	4	18
4-Isopropyltoluene	800	711		ug/Kg		89	78 - 126	3	18
Acetone	3200	2660		ug/Kg		83	20 - 160	13	30
Benzene	800	783	*	ug/Kg		98	70 - 128	21	19
Bromobenzene	800	815		ug/Kg		102	80 - 120	3	19
Bromoform	800	525		ug/Kg		66	50 - 124	7	25
Bromomethane	800	958		ug/Kg		120	57 - 148	1	29
Carbon tetrachloride	800	723		ug/Kg		90	59 - 145	4	19
Chlorobenzene	800	809		ug/Kg		101	75 - 120	0	21
Chlorobromomethane	800	814		ug/Kg		102	78 - 123	9	19
Chlorodibromomethane	800	616		ug/Kg		77	69 - 129	1	23
Chloroethane	800	931		ug/Kg		116	48 - 167	10	53
Chloroform	800	788		ug/Kg		98	78 - 125	2	17
Chloromethane	800	751		ug/Kg		94	55 - 136	8	26
cis-1,2-Dichloroethene	800	797		ug/Kg		100	70 - 130	3	19
cis-1,3-Dichloropropene	800	677		ug/Kg		85	69 - 129	2	19
Dibromomethane	800	788		ug/Kg		98	78 - 126	1	18
Dichlorobromomethane	800	587		ug/Kg		73	58 - 133	1	19
Dichlorodifluoromethane	800	729		ug/Kg		91	38 - 150	4	26
Ethylbenzene	800	823		ug/Kg		103	78 - 126	1	23
Ethylene Dibromide	800	838		ug/Kg		105	69 - 126	4	21
Hexachlorobutadiene	800	698		ug/Kg		87	68 - 134	4	21
Isopropylbenzene	800	783		ug/Kg		98	79 - 127	3	20
Methyl tert-butyl ether	800	744		ug/Kg		93	65 - 125	8	30
Methylene Chloride	800	773		ug/Kg		97	57 - 146	0	21
m-Xylene & p-Xylene	800	838		ug/Kg		105	78 - 126	1	23
Naphthalene	800	632		ug/Kg		79	14 - 170	9	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			800	659		ug/Kg		82	78 - 128	0	17
N-Propylbenzene			800	764		ug/Kg		95	81 - 127	1	20
o-Xylene			800	800		ug/Kg		100	77 - 127	0	22
sec-Butylbenzene			800	724		ug/Kg		90	78 - 128	0	17
Styrene			800	846		ug/Kg		106	79 - 127	1	21
tert-Butylbenzene			800	755		ug/Kg		94	71 - 136	1	27
Tetrachloroethene			800	815		ug/Kg		102	56 - 150	3	27
Toluene			800	807		ug/Kg		101	75 - 126	1	19
trans-1,2-Dichloroethene			800	789		ug/Kg		99	76 - 131	3	18
trans-1,3-Dichloropropene			800	683		ug/Kg		85	72 - 129	3	20
Trichloroethene			800	811		ug/Kg		101	83 - 124	0	17
Trichlorofluoromethane			800	690		ug/Kg		86	47 - 165	2	54
Vinyl chloride			800	754		ug/Kg		94	67 - 131	2	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*
Ethylbenzene-d10	*100*		*70 - 120*
Fluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*65 - 140*

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg			09/29/13 01:03	1
2-Chlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,3-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
1,4-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Benzyl alcohol	ND		100		ug/Kg			09/29/13 01:03	1
1,2-Dichlorobenzene	ND		55		ug/Kg			09/29/13 01:03	1
2-Methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
3 & 4 Methylphenol	ND		200		ug/Kg			09/29/13 01:03	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg			09/29/13 01:03	1
Hexachloroethane	ND		100		ug/Kg			09/29/13 01:03	1
Nitrobenzene	ND		100		ug/Kg			09/29/13 01:03	1
Isophorone	ND		100		ug/Kg			09/29/13 01:03	1
2-Nitrophenol	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dimethylphenol	ND		100		ug/Kg			09/29/13 01:03	1
Benzoic acid	ND		2500		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Naphthalene	ND		20		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobutadiene	ND		50		ug/Kg			09/29/13 01:03	1
4-Chloro-3-methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Methylnaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
Hexachlorocyclopentadiene	ND		100		ug/Kg			09/29/13 01:03	1
2,4,6-Trichlorophenol	ND		150		ug/Kg			09/29/13 01:03	1
2,4,5-Trichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Chloronaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
2-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Dimethyl phthalate	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthylene	ND		20		ug/Kg			09/29/13 01:03	1
2,6-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
3-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthene	ND		20		ug/Kg			09/29/13 01:03	1
2,4-Dinitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
4-Nitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
Dibenzofuran	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
Diethyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Fluorene	ND		20		ug/Kg			09/29/13 01:03	1
4-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg			09/29/13 01:03	1
N-Nitrosodiphenylamine	ND		50		ug/Kg			09/29/13 01:03	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Pentachlorophenol	ND		200		ug/Kg			09/29/13 01:03	1
Phenanthrene	ND		20		ug/Kg			09/29/13 01:03	1
Anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Di-n-butyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Pyrene	ND		20		ug/Kg			09/29/13 01:03	1
Butyl benzyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg			09/29/13 01:03	1
Benzo[a]anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Chrysene	ND		25		ug/Kg			09/29/13 01:03	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg			09/29/13 01:03	1
Di-n-octyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Benzo[a]pyrene	ND		30		ug/Kg			09/29/13 01:03	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg			09/29/13 01:03	1
Dibenz(a,h)anthracene	ND		40		ug/Kg			09/29/13 01:03	1
Benzo[g,h,i]perylene	ND		25		ug/Kg			09/29/13 01:03	1
Carbazole	ND		100		ug/Kg			09/29/13 01:03	1
1-Methylnaphthalene	ND		30		ug/Kg			09/29/13 01:03	1
Benzo[b]fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Benzo[k]fluoranthene	ND		25		ug/Kg			09/29/13 01:03	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		36 - 145		09/29/13 01:03	1
Phenol-d5	106		38 - 149		09/29/13 01:03	1
Nitrobenzene-d5	102		38 - 141		09/29/13 01:03	1
2-Fluorobiphenyl	96		42 - 140		09/29/13 01:03	1
2,4,6-Tribromophenol	72		28 - 143		09/29/13 01:03	1
Terphenyl-d14	113		42 - 151		09/29/13 01:03	1

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1240		ug/Kg		124	66 - 126
Bis(2-chloroethyl)ether	998	970		ug/Kg		97	57 - 122
2-Chlorophenol	1000	1280	*	ug/Kg		128	65 - 125
1,3-Dichlorobenzene	1000	1020		ug/Kg		102	64 - 124
1,4-Dichlorobenzene	1010	1030		ug/Kg		102	62 - 132
Benzyl alcohol	997	1080		ug/Kg		108	42 - 147
1,2-Dichlorobenzene	1010	1000		ug/Kg		99	68 - 118
2-Methylphenol	997	1030		ug/Kg		103	56 - 121
3 & 4 Methylphenol	1000	1110		ug/Kg		111	61 - 126
N-Nitrosodi-n-propylamine	1000	995		ug/Kg		99	52 - 127
Hexachloroethane	1010	1040		ug/Kg		102	56 - 131
Nitrobenzene	1020	1110		ug/Kg		109	59 - 134
Isophorone	988	1190	*	ug/Kg		121	53 - 118
2-Nitrophenol	1010	1320	*	ug/Kg		131	58 - 128
2,4-Dimethylphenol	1010	1540	*	ug/Kg		153	58 - 133
Benzoic acid	5090	5490		ug/Kg		108	10 - 130
Bis(2-chloroethoxy)methane	998	1030		ug/Kg		103	63 - 128
2,4-Dichlorophenol	1020	1330	*	ug/Kg		131	59 - 124
1,2,4-Trichlorobenzene	1000	1010		ug/Kg		101	63 - 128
Naphthalene	1010	991		ug/Kg		98	64 - 129
4-Chloroaniline	983	627		ug/Kg		64	20 - 181
Hexachlorobutadiene	1000	1010		ug/Kg		101	59 - 134
4-Chloro-3-methylphenol	1010	1210		ug/Kg		120	58 - 128
2-Methylnaphthalene	991	1010		ug/Kg		102	65 - 125
Hexachlorocyclopentadiene	1000	797		ug/Kg		80	30 - 132
2,4,6-Trichlorophenol	1010	1120		ug/Kg		111	66 - 131
2,4,5-Trichlorophenol	1010	1050		ug/Kg		104	64 - 124
2-Chloronaphthalene	1000	1010		ug/Kg		101	69 - 129
2-Nitroaniline	983	897		ug/Kg		91	58 - 133
Dimethyl phthalate	1000	1130		ug/Kg		112	65 - 125
Acenaphthylene	1000	1090		ug/Kg		109	69 - 129
2,6-Dinitrotoluene	1000	993		ug/Kg		99	65 - 125
3-Nitroaniline	987	524	*	ug/Kg		53	80 - 165
Acenaphthene	1000	974		ug/Kg		97	65 - 130
2,4-Dinitrophenol	5060	4260		ug/Kg		84	53 - 168
4-Nitrophenol	5030	4670		ug/Kg		93	47 - 172

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

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	1010	1000		ug/Kg		100	70 - 125
2,4-Dinitrotoluene	1000	1050		ug/Kg		105	57 - 122
Diethyl phthalate	1000	1040		ug/Kg		104	64 - 129
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130
Fluorene	1010	1050		ug/Kg		104	68 - 128
4-Nitroaniline	991	686	*	ug/Kg		69	70 - 150
4,6-Dinitro-2-methylphenol	5060	5330		ug/Kg		105	38 - 143
N-Nitrosodiphenylamine	1000	1180		ug/Kg		118	88 - 153
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134
Hexachlorobenzene	1000	1030		ug/Kg		103	61 - 136
Pentachlorophenol	1000	1140		ug/Kg		114	29 - 124
Phenanthrene	1000	962		ug/Kg		96	65 - 125
Anthracene	1010	1030		ug/Kg		102	73 - 123
Di-n-butyl phthalate	1000	1060		ug/Kg		106	69 - 124
Fluoranthene	1000	1070		ug/Kg		107	61 - 121
Pyrene	998	1030		ug/Kg		103	54 - 134
Butyl benzyl phthalate	1000	1080		ug/Kg		107	65 - 140
3,3'-Dichlorobenzidine	1980	1420	*	ug/Kg		71	73 - 163
Benzo[a]anthracene	1000	1020		ug/Kg		102	64 - 124
Chrysene	992	962		ug/Kg		97	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1100		ug/Kg		110	64 - 144
Di-n-octyl phthalate	1010	986		ug/Kg		98	58 - 148
Benzo[a]pyrene	1000	1040		ug/Kg		104	68 - 128
Indeno[1,2,3-cd]pyrene	998	879		ug/Kg		88	59 - 139
Dibenz(a,h)anthracene	1000	992		ug/Kg		99	57 - 142
Benzo[g,h,i]perylene	1010	1080		ug/Kg		107	57 - 142
Carbazole	1010	1060		ug/Kg		105	88 - 158
1-Methylnaphthalene	997	1040		ug/Kg		105	48 - 148
Benzo[b]fluoranthene	1000	1100		ug/Kg		110	66 - 136
Benzo[k]fluoranthene	1010	1060		ug/Kg		105	63 - 143
bis (2-chloroisopropyl) ether	993	815		ug/Kg		82	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*113*		*36 - 145*
Phenol-d5	*108*		*38 - 149*
Nitrobenzene-d5	*104*		*38 - 141*
2-Fluorobiphenyl	*97*		*42 - 140*
2,4,6-Tribromophenol	*99*		*28 - 143*
Terphenyl-d14	*110*		*42 - 151*

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1200		ug/Kg		120	66 - 126	3	26
Bis(2-chloroethyl)ether	998	943		ug/Kg		95	57 - 122	3	60
2-Chlorophenol	1000	1220		ug/Kg		121	65 - 125	5	27

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1000	996		ug/Kg		99	64 - 124	2	60
1,4-Dichlorobenzene	1010	1010		ug/Kg		99	62 - 132	3	32
Benzyl alcohol	997	1040		ug/Kg		104	42 - 147	4	60
1,2-Dichlorobenzene	1010	978		ug/Kg		97	68 - 118	2	60
2-Methylphenol	997	985		ug/Kg		99	56 - 121	4	25
3 & 4 Methylphenol	1000	1080		ug/Kg		108	61 - 126	3	27
N-Nitrosodi-n-propylamine	1000	984		ug/Kg		98	52 - 127	1	28
Hexachloroethane	1010	963		ug/Kg		95	56 - 131	7	60
Nitrobenzene	1020	1100		ug/Kg		108	59 - 134	1	60
Isophorone	988	1170		ug/Kg		118	53 - 118	2	60
2-Nitrophenol	1010	1290		ug/Kg		128	58 - 128	2	60
2,4-Dimethylphenol	1010	1470	*	ug/Kg		146	58 - 133	5	60
Benzoic acid	5090	5140		ug/Kg		101	10 - 130	7	60
Bis(2-chloroethoxy)methane	998	996		ug/Kg		100	63 - 128	3	60
2,4-Dichlorophenol	1020	1280	*	ug/Kg		126	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	994		ug/Kg		99	63 - 128	1	28
Naphthalene	1010	971		ug/Kg		96	64 - 129	2	26
4-Chloroaniline	983	553		ug/Kg		56	20 - 181	12	60
Hexachlorobutadiene	1000	999		ug/Kg		100	59 - 134	1	60
4-Chloro-3-methylphenol	1010	1200		ug/Kg		119	58 - 128	1	27
2-Methylnaphthalene	991	966		ug/Kg		97	65 - 125	4	27
Hexachlorocyclopentadiene	1000	802		ug/Kg		80	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1120		ug/Kg		110	66 - 131	0	60
2,4,5-Trichlorophenol	1010	994		ug/Kg		98	64 - 124	6	60
2-Chloronaphthalene	1000	985		ug/Kg		98	69 - 129	2	25
2-Nitroaniline	983	891		ug/Kg		91	58 - 133	1	60
Dimethyl phthalate	1000	1090		ug/Kg		109	65 - 125	3	60
Acenaphthylene	1000	1040		ug/Kg		104	69 - 129	4	28
2,6-Dinitrotoluene	1000	995		ug/Kg		99	65 - 125	0	60
3-Nitroaniline	987	509	*	ug/Kg		52	80 - 165	3	60
Acenaphthene	1000	956		ug/Kg		95	65 - 130	2	27
2,4-Dinitrophenol	5060	4020		ug/Kg		79	53 - 168	6	60
4-Nitrophenol	5030	4730		ug/Kg		94	47 - 172	1	33
Dibenzofuran	1010	1010		ug/Kg		100	70 - 125	1	60
2,4-Dinitrotoluene	1000	1070		ug/Kg		107	57 - 122	2	31
Diethyl phthalate	1000	1030		ug/Kg		103	64 - 129	1	26
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130	0	60
Fluorene	1010	1030		ug/Kg		102	68 - 128	2	31
4-Nitroaniline	991	755		ug/Kg		76	70 - 150	10	60
4,6-Dinitro-2-methylphenol	5060	5130		ug/Kg		101	38 - 143	4	60
N-Nitrosodiphenylamine	1000	1170		ug/Kg		117	88 - 153	0	60
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134	0	60
Hexachlorobenzene	1000	1050		ug/Kg		104	61 - 136	2	60
Pentachlorophenol	1000	1120		ug/Kg		112	29 - 124	2	68
Phenanthrene	1000	951		ug/Kg		95	65 - 125	1	28
Anthracene	1010	1020		ug/Kg		102	73 - 123	0	27
Di-n-butyl phthalate	1000	1050		ug/Kg		105	69 - 124	1	60
Fluoranthene	1000	1070		ug/Kg		107	61 - 121	0	36

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene			998	1010		ug/Kg		102	54 - 134	2	31
Butyl benzyl phthalate			1000	1040		ug/Kg		104	65 - 140	3	60
3,3'-Dichlorobenzidine			1980	1300	*	ug/Kg		66	73 - 163	8	60
Benzo[a]anthracene			1000	987		ug/Kg		98	64 - 124	3	27
Chrysene			992	942		ug/Kg		95	71 - 126	2	26
Bis(2-ethylhexyl) phthalate			1000	1060		ug/Kg		106	64 - 144	4	60
Di-n-octyl phthalate			1010	972		ug/Kg		97	58 - 148	1	31
Benzo[a]pyrene			1000	1000		ug/Kg		100	68 - 128	3	30
Indeno[1,2,3-cd]pyrene			998	823		ug/Kg		82	59 - 139	7	29
Dibenz(a,h)anthracene			1000	902		ug/Kg		90	57 - 142	10	30
Benzo[g,h,i]perylene			1010	1040		ug/Kg		103	57 - 142	4	28
Carbazole			1010	1040		ug/Kg		103	88 - 158	2	60
1-Methylnaphthalene			997	1010		ug/Kg		101	48 - 148	3	30
Benzo[b]fluoranthene			1000	1090		ug/Kg		108	66 - 136	1	31
Benzo[k]fluoranthene			1010	1080		ug/Kg		108	63 - 143	2	31
bis (2-chloroisopropyl) ether			993	759		ug/Kg		76	44 - 140	7	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*104*		*36 - 145*
Phenol-d5	*101*		*38 - 149*
Nitrobenzene-d5	*101*		*38 - 141*
2-Fluorobiphenyl	*93*		*42 - 140*
2,4,6-Tribromophenol	*95*		*28 - 143*
Terphenyl-d14	*105*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg			09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*		*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*		*09/26/13 18:50*	*1*

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

Lab Sample ID: LCS 580-145585/2-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-145876/1-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:19	1
Barium	ND		0.010		mg/L			09/30/13 10:19	1
Cadmium	ND		0.010		mg/L			09/30/13 10:19	1
Chromium	ND		0.025		mg/L			09/30/13 10:19	1
Lead	ND		0.030		mg/L			09/30/13 10:19	1
Selenium	ND		0.10		mg/L			09/30/13 10:19	1
Silver	ND		0.050		mg/L			09/30/13 10:19	1

Lab Sample ID: LCS 580-145876/2-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			4.00	4.19		mg/L		105	80 - 120		
Barium			4.00	3.99		mg/L		100	80 - 120		
Cadmium			0.100	0.103		mg/L		103	80 - 120		
Chromium			0.400	0.401		mg/L		100	80 - 120		
Lead			1.00	0.980		mg/L		98	80 - 120		
Selenium			4.00	4.26		mg/L		107	80 - 120		
Silver			0.600	0.573		mg/L		95	80 - 120		

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

Lab Sample ID: LCSD 580-145876/3-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.28		mg/L		107	80 - 120	2	20
Barium	4.00	4.01		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.104		mg/L		104	80 - 120	1	20
Chromium	0.400	0.408		mg/L		102	80 - 120	2	20
Lead	1.00	1.01		mg/L		101	80 - 120	3	20
Selenium	4.00	4.34		mg/L		109	80 - 120	2	20
Silver	0.600	0.591		mg/L		99	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-145876/1-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:33	1

Lab Sample ID: LCS 580-145876/2-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0200	0.0171		mg/L		85	80 - 120

Lab Sample ID: LCSD 580-145876/3-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0200	0.0168		mg/L		84	80 - 120	2	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: PARKWATER

TestAmerica Job ID: 580-40421-1

Client Sample ID: SP-A7D1-092013

Lab Sample ID: 580-40421-1

Date Collected: 09/20/13 09:00
Matrix: Solid
Date Received: 09/21/13 10:30
Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	146067	09/29/13 05:29	CGM	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 20:18	SGH	TAL SEA
TCLP	Analysis	7470A		1	146027	09/27/13 15:04	PAB	TAL SEA
TCLP	Analysis	6010B		1	146143	09/30/13 11:11	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	JJP	TAL SEA

Client Sample ID: SP-A7D2-092013

Lab Sample ID: 580-40421-2

Date Collected: 09/20/13 09:10
Matrix: Solid
Date Received: 09/21/13 10:30
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	145776	09/25/13 18:21	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145801	09/25/13 11:40	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

TestAmerica Job ID: 580-40421-1

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: 580-40421-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40421-1	SP-A7D1-092013	Solid	09/20/13 09:00	09/21/13 10:30
580-40421-2	SP-A7D2-092013	Solid	09/20/13 09:10	09/21/13 10:30

BNSF RAILWAY

CHAIN OF CUSTODY

LAB WORK ORDER: 40421

LABORATORY INFORMATION

Laboratory: TEST AMERICA — Project Manager: KRIS ALLEN
Address: 5755 8TH ST. EAST — Phone:
City/State/ZIP: SPOKANE, WA 98424 — Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 1396110.04
BNSF Project Name: PARKWATER
BNSF Contact: BRUCE SHEPPARD
Project State of Origin: WA
Project City: SPOKANE
BNSF Work Order No.: TTO101-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Address: 32001 32ND AVE S. SUITE 100
City/State/ZIP: FEDERAL WAY WA 98001
Project Number: 1396110.04
Project Manager: HOWARD YOUNG
Email: howardyoung@kennedyjenks.com
Phone: 253-835-6400 Fax: 253-952-3435

TURNAROUND TIME

- [ ] 1-day Rush
- [ ] 2-day Rush
- [x] 3-day Rush
- [ ] 5- to 8-day Rush
- [ ] Standard 10-Day
- [x] Other SEE COMMENTS

DELIVERABLES

- [ ] BNSF Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [x] Other Deliverables? KJ custom EDD
- [x] EDD Req, Format?

SAMPLE INFORMATION

#	Sample identification	Containers	Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS (SW1311/6010)	SEMI VOLATILE ORGANICS (8270)	PCBs (SW8082)	VOLATILE ORGANIC COMPOUNDS (8260)	COMMENTS	LAB USE
1	~~A7D~~ SP-A7D1-092013	2	9/20/13	0900	HY	NA	C	S	X	X	X			1
2	SP-A7D1-092013	1	9/20/13	0910	HY	NA	G	S				X		2
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

A1
Cooler/TB Dig/IR cor 4.7 unc 4.7
Cooler Dsc blue/white @ Lab
Wet/Packs Packing bubble
WICS. fedex sat

Cooler/TB Dig/IR cor 2.7/2.3 ~~4.7~~ unc 4.7
Cooler Dsc blue/white @ Lab
Wet/Packs Packing bubble
WICS. fedex sat

580-40421 Chain of Custody

Relinquished By: [signature]	Date/Time: 9/20/13 13:30	Received By: [signature]	Date/Time: 9/20/13 1430
Relinquished By: [signature]	Date/Time: 9/20/13 1500	Received By: [signature]	Date/Time: 9/21/13 1030
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received by Laboratory:	Date/Time:	Lab Remarks:	Lab: Custody Intact? ☐ Yes ☐ No

Comments and Special Analytical Requirements:
TCLP METALS - 3 DAY RUSH (24 HR)
VOCs, SVOCs, PCBs - 3 DAY RUSH

Custody Seal No.:
BNSF COC No.:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
DUPLICATE - CONSULTANT
TAL-1001 (06/08)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40421-1

Login Number: 40421

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	

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: 580-40422-1
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:
10/1/2013 1:59:05 PM

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

Table of Contents

Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Job ID: 580-40422-1

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 2.7º C and 4.7º C.

The following samples to be analyzed by method 8260 were received and analyzed from an unpreserved bulk soil jar: SP-A7E2-092013 (580-40422-1).

GC/MS VOA - Method(s) 8260B
The RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 145776 recovered outside control limits for the following analytes: Benzene. The individual recoveries met the acceptance limit. No further action was taken on this outlier.

No other analytical or quality issues were noted.

GC/MS Semi VOA
The recovery of the LCS and LCSD is outside of recovery limits for several compounds. The samples will be re-extracted and re-analysed. The data from the original extraction has been qualified and reported.

No other analytical or quality issues were noted.

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.

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Client Sample ID: SP-A7E2-092013
Date Collected: 09/20/13 08:45
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40422-1
Matrix: Solid
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,1,1-Trichloroethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,1,2,2-Tetrachloroethane	ND	H	10		ug/Kg	☼		09/25/13 18:42	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼		09/25/13 18:42	1
1,1-Dichloroethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,1-Dichloroethene	ND	H	21		ug/Kg	☼		09/25/13 18:42	1
1,1-Dichloropropene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,2,3-Trichlorobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,2,3-Trichloropropane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,2,4-Trichlorobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,2,4-Trimethylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,2-Dibromo-3-Chloropropane	ND	H	210		ug/Kg	☼		09/25/13 18:42	1
1,2-Dichlorobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,2-Dichloroethane	ND	H	17		ug/Kg	☼		09/25/13 18:42	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼		09/25/13 18:42	1
1,3,5-Trimethylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,3-Dichlorobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,3-Dichloropropane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
1,4-Dichlorobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
2,2-Dichloropropane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
2-Chlorotoluene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
4-Chlorotoluene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
4-Isopropyltoluene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Acetone	ND	H	420		ug/Kg	☼		09/25/13 18:42	1
Benzene	**18**	**H ***	17		ug/Kg	☼		09/25/13 18:42	1
Bromobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Bromoform	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Bromomethane	ND	H	150		ug/Kg	☼		09/25/13 18:42	1
Carbon tetrachloride	ND	H	21		ug/Kg	☼		09/25/13 18:42	1
Chlorobenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Chlorobromomethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Chlorodibromomethane	ND	H	21		ug/Kg	☼		09/25/13 18:42	1
Chloroethane	ND	H	420		ug/Kg	☼		09/25/13 18:42	1
Chloroform	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Chloromethane	ND	H	420		ug/Kg	☼		09/25/13 18:42	1
cis-1,2-Dichloroethene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
cis-1,3-Dichloropropene	ND	H	17		ug/Kg	☼		09/25/13 18:42	1
Dibromomethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Dichlorobromomethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Dichlorodifluoromethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Ethylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Ethylene Dibromide	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Hexachlorobutadiene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Isopropylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Methyl tert-butyl ether	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Methylene Chloride	ND	H	17		ug/Kg	☼		09/25/13 18:42	1
m-Xylene & p-Xylene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Naphthalene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
n-Butylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Client Sample ID: SP-A7E2-092013
Date Collected: 09/20/13 08:45
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40422-1
Matrix: Solid
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
o-Xylene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
sec-Butylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Styrene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
tert-Butylbenzene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Tetrachloroethene	ND	H	21		ug/Kg	☼		09/25/13 18:42	1
Toluene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
trans-1,2-Dichloroethene	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
trans-1,3-Dichloropropene	ND	H	17		ug/Kg	☼		09/25/13 18:42	1
Trichloroethene	ND	H	17		ug/Kg	☼		09/25/13 18:42	1
Trichlorofluoromethane	ND	H	42		ug/Kg	☼		09/25/13 18:42	1
Vinyl chloride	ND	H	8.4		ug/Kg	☼		09/25/13 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*		*09/25/13 18:42*	*1*
Ethylbenzene-d10	*100*		*70 - 120*		*09/25/13 18:42*	*1*
Fluorobenzene (Surr)	*98*		*80 - 120*		*09/25/13 18:42*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/25/13 18:42*	*1*
Trifluorotoluene (Surr)	*100*		*65 - 140*		*09/25/13 18:42*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**90**		0.10		%			09/24/13 17:22	1
Percent Moisture	**9.8**		0.10		%			09/24/13 17:22	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Client Sample ID: SP-A7E1-092013
Date Collected: 09/20/13 08:45
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40422-2
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg	☼		09/29/13 05:53	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg	☼		09/29/13 05:53	1
2-Chlorophenol	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
1,3-Dichlorobenzene	ND		52		ug/Kg	☼		09/29/13 05:53	1
1,4-Dichlorobenzene	ND		52		ug/Kg	☼		09/29/13 05:53	1
Benzyl alcohol	ND		100		ug/Kg	☼		09/29/13 05:53	1
1,2-Dichlorobenzene	ND		58		ug/Kg	☼		09/29/13 05:53	1
2-Methylphenol	ND		100		ug/Kg	☼		09/29/13 05:53	1
3 & 4 Methylphenol	ND		210		ug/Kg	☼		09/29/13 05:53	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg	☼		09/29/13 05:53	1
Hexachloroethane	ND		100		ug/Kg	☼		09/29/13 05:53	1
Nitrobenzene	ND		100		ug/Kg	☼		09/29/13 05:53	1
Isophorone	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
2-Nitrophenol	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
2,4-Dimethylphenol	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
Benzoic acid	ND		2600		ug/Kg	☼		09/29/13 05:53	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg	☼		09/29/13 05:53	1
2,4-Dichlorophenol	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
1,2,4-Trichlorobenzene	ND		52		ug/Kg	☼		09/29/13 05:53	1
Naphthalene	**60**		21		ug/Kg	☼		09/29/13 05:53	1
4-Chloroaniline	ND		100		ug/Kg	☼		09/29/13 05:53	1
Hexachlorobutadiene	ND		52		ug/Kg	☼		09/29/13 05:53	1
4-Chloro-3-methylphenol	ND		100		ug/Kg	☼		09/29/13 05:53	1
2-Methylnaphthalene	**67**		21		ug/Kg	☼		09/29/13 05:53	1
Hexachlorocyclopentadiene	ND		100		ug/Kg	☼		09/29/13 05:53	1
2,4,6-Trichlorophenol	ND		160		ug/Kg	☼		09/29/13 05:53	1
2,4,5-Trichlorophenol	ND		100		ug/Kg	☼		09/29/13 05:53	1
2-Chloronaphthalene	ND		21		ug/Kg	☼		09/29/13 05:53	1
2-Nitroaniline	ND		100		ug/Kg	☼		09/29/13 05:53	1
Dimethyl phthalate	ND		100		ug/Kg	☼		09/29/13 05:53	1
Acenaphthylene	**38**		21		ug/Kg	☼		09/29/13 05:53	1
2,6-Dinitrotoluene	ND		100		ug/Kg	☼		09/29/13 05:53	1
3-Nitroaniline	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
Acenaphthene	**38**		21		ug/Kg	☼		09/29/13 05:53	1
2,4-Dinitrophenol	ND		1000		ug/Kg	☼		09/29/13 05:53	1
4-Nitrophenol	ND		1000		ug/Kg	☼		09/29/13 05:53	1
Dibenzofuran	ND		100		ug/Kg	☼		09/29/13 05:53	1
2,4-Dinitrotoluene	ND		100		ug/Kg	☼		09/29/13 05:53	1
Diethyl phthalate	ND		210		ug/Kg	☼		09/29/13 05:53	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg	☼		09/29/13 05:53	1
Fluorene	**36**		21		ug/Kg	☼		09/29/13 05:53	1
4-Nitroaniline	ND	*	100		ug/Kg	☼		09/29/13 05:53	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg	☼		09/29/13 05:53	1
N-Nitrosodiphenylamine	ND		52		ug/Kg	☼		09/29/13 05:53	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg	☼		09/29/13 05:53	1
Hexachlorobenzene	ND		52		ug/Kg	☼		09/29/13 05:53	1
Pentachlorophenol	ND		210		ug/Kg	☼		09/29/13 05:53	1
Phenanthrene	**540**		21		ug/Kg	☼		09/29/13 05:53	1
Anthracene	**150**		21		ug/Kg	☼		09/29/13 05:53	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Client Sample ID: SP-A7E1-092013
Date Collected: 09/20/13 08:45
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40422-2
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		520		ug/Kg	☼		09/29/13 05:53	1
Fluoranthene	**1300**		21		ug/Kg	☼		09/29/13 05:53	1
Pyrene	**1200**		21		ug/Kg	☼		09/29/13 05:53	1
Butyl benzyl phthalate	ND		210		ug/Kg	☼		09/29/13 05:53	1
3,3'-Dichlorobenzidine	ND	*	210		ug/Kg	☼		09/29/13 05:53	1
Benzo[a]anthracene	**670**		21		ug/Kg	☼		09/29/13 05:53	1
Chrysene	**710**		26		ug/Kg	☼		09/29/13 05:53	1
Bis(2-ethylhexyl) phthalate	ND		630		ug/Kg	☼		09/29/13 05:53	1
Di-n-octyl phthalate	ND		520		ug/Kg	☼		09/29/13 05:53	1
Benzo[a]pyrene	**770**		31		ug/Kg	☼		09/29/13 05:53	1
Indeno[1,2,3-cd]pyrene	**270**		42		ug/Kg	☼		09/29/13 05:53	1
Dibenz(a,h)anthracene	**78**		42		ug/Kg	☼		09/29/13 05:53	1
Benzo[g,h,i]perylene	**260**		26		ug/Kg	☼		09/29/13 05:53	1
Carbazole	ND		100		ug/Kg	☼		09/29/13 05:53	1
1-Methylnaphthalene	**54**		31		ug/Kg	☼		09/29/13 05:53	1
Benzo[b]fluoranthene	**1300**		21		ug/Kg	☼		09/29/13 05:53	1
Benzo[k]fluoranthene	**550**		26		ug/Kg	☼		09/29/13 05:53	1
bis (2-chloroisopropyl) ether	ND		260		ug/Kg	☼		09/29/13 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*93*		*36 - 145*		*09/29/13 05:53*	*1*
Phenol-d5	*91*		*38 - 149*		*09/29/13 05:53*	*1*
Nitrobenzene-d5	*97*		*38 - 141*		*09/29/13 05:53*	*1*
2-Fluorobiphenyl	*85*		*42 - 140*		*09/29/13 05:53*	*1*
2,4,6-Tribromophenol	*85*		*28 - 143*		*09/29/13 05:53*	*1*
Terphenyl-d14	*102*		*42 - 151*		*09/29/13 05:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg	☼		09/26/13 20:32	1
PCB-1221	ND		0.011		mg/Kg	☼		09/26/13 20:32	1
PCB-1232	ND		0.011		mg/Kg	☼		09/26/13 20:32	1
PCB-1242	ND		0.010		mg/Kg	☼		09/26/13 20:32	1
PCB-1248	ND		0.010		mg/Kg	☼		09/26/13 20:32	1
PCB-1254	ND		0.010		mg/Kg	☼		09/26/13 20:32	1
PCB-1260	**0.29**		0.010		mg/Kg	☼		09/26/13 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*45 - 135*		*09/26/13 20:32*	*1*
DCB Decachlorobiphenyl	*92*		*50 - 140*		*09/26/13 20:32*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:56	1
Barium	**0.98**		0.010		mg/L			09/30/13 10:56	1
Cadmium	**0.011**		0.010		mg/L			09/30/13 10:56	1
Chromium	ND		0.025		mg/L			09/30/13 10:56	1
Lead	**0.071**		0.030		mg/L			09/30/13 10:56	1
Selenium	ND		0.10		mg/L			09/30/13 10:56	1
Silver	ND		0.050		mg/L			09/30/13 10:56	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Client Sample ID: SP-A7E1-092013
Date Collected: 09/20/13 08:45
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40422-2
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/24/13 17:22	1
Percent Moisture	6.9		0.10		%			09/24/13 17:22	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,1-Trichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg			09/25/13 12:19	1
1,1,2-Trichloroethane	ND		12		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethane	ND		40		ug/Kg			09/25/13 12:19	1
1,1-Dichloroethene	ND		20		ug/Kg			09/25/13 12:19	1
1,1-Dichloropropene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,3-Trichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg			09/25/13 12:19	1
1,2-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,2-Dichloroethane	ND		16		ug/Kg			09/25/13 12:19	1
1,2-Dichloropropane	ND		12		ug/Kg			09/25/13 12:19	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
1,3-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
1,4-Dichlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
2,2-Dichloropropane	ND		40		ug/Kg			09/25/13 12:19	1
2-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Chlorotoluene	ND		40		ug/Kg			09/25/13 12:19	1
4-Isopropyltoluene	ND		40		ug/Kg			09/25/13 12:19	1
Acetone	ND		400		ug/Kg			09/25/13 12:19	1
Benzene	ND		16		ug/Kg			09/25/13 12:19	1
Bromobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Bromoform	ND		40		ug/Kg			09/25/13 12:19	1
Bromomethane	ND		140		ug/Kg			09/25/13 12:19	1
Carbon tetrachloride	ND		20		ug/Kg			09/25/13 12:19	1
Chlorobenzene	ND		40		ug/Kg			09/25/13 12:19	1
Chlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Chlorodibromomethane	ND		20		ug/Kg			09/25/13 12:19	1
Chloroethane	ND		400		ug/Kg			09/25/13 12:19	1
Chloroform	ND		40		ug/Kg			09/25/13 12:19	1
Chloromethane	ND		400		ug/Kg			09/25/13 12:19	1
cis-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
cis-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Dibromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorobromomethane	ND		40		ug/Kg			09/25/13 12:19	1
Dichlorodifluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Ethylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Ethylene Dibromide	ND		40		ug/Kg			09/25/13 12:19	1
Hexachlorobutadiene	ND		40		ug/Kg			09/25/13 12:19	1
Isopropylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Methyl tert-butyl ether	ND		40		ug/Kg			09/25/13 12:19	1
Methylene Chloride	ND		16		ug/Kg			09/25/13 12:19	1
m-Xylene & p-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
Naphthalene	ND		40		ug/Kg			09/25/13 12:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145824/1-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
N-Propylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
o-Xylene	ND		40		ug/Kg			09/25/13 12:19	1
sec-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Styrene	ND		40		ug/Kg			09/25/13 12:19	1
tert-Butylbenzene	ND		40		ug/Kg			09/25/13 12:19	1
Tetrachloroethene	ND		20		ug/Kg			09/25/13 12:19	1
Toluene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,2-Dichloroethene	ND		40		ug/Kg			09/25/13 12:19	1
trans-1,3-Dichloropropene	ND		16		ug/Kg			09/25/13 12:19	1
Trichloroethene	ND		16		ug/Kg			09/25/13 12:19	1
Trichlorofluoromethane	ND		40		ug/Kg			09/25/13 12:19	1
Vinyl chloride	ND		8.0		ug/Kg			09/25/13 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 120*		*09/25/13 12:19*	*1*
Ethylbenzene-d10	*116*		*70 - 120*		*09/25/13 12:19*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*		*09/25/13 12:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/25/13 12:19*	*1*
Trifluorotoluene (Surr)	*102*		*65 - 140*		*09/25/13 12:19*	*1*

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	651		ug/Kg		81	72 - 123
1,1,1-Trichloroethane	800	700		ug/Kg		87	63 - 135
1,1,2,2-Tetrachloroethane	800	755		ug/Kg		94	73 - 125
1,1,2-Trichloroethane	800	772		ug/Kg		96	77 - 124
1,1-Dichloroethane	800	766		ug/Kg		96	70 - 128
1,1-Dichloroethene	800	764		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	818		ug/Kg		102	77 - 123
1,2,3-Trichlorobenzene	800	521		ug/Kg		65	61 - 130
1,2,3-Trichloropropane	800	803		ug/Kg		100	77 - 123
1,2,4-Trichlorobenzene	800	589		ug/Kg		74	61 - 130
1,2,4-Trimethylbenzene	800	762		ug/Kg		95	79 - 124
1,2-Dibromo-3-Chloropropane	800	424		ug/Kg		53	53 - 132
1,2-Dichlorobenzene	800	756		ug/Kg		94	79 - 117
1,2-Dichloroethane	800	674		ug/Kg		84	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	754		ug/Kg		94	80 - 125
1,3-Dichlorobenzene	800	758		ug/Kg		95	79 - 119
1,3-Dichloropropane	800	786		ug/Kg		98	77 - 123
1,4-Dichlorobenzene	800	745		ug/Kg		93	79 - 117
2,2-Dichloropropane	800	711		ug/Kg		89	56 - 144
2-Chlorotoluene	800	778		ug/Kg		97	79 - 122
4-Chlorotoluene	800	821		ug/Kg		103	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145824/20-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	731		ug/Kg		91	78 - 126
Acetone	3200	2340		ug/Kg		73	20 - 160
Benzene	800	971		ug/Kg		121	70 - 128
Bromobenzene	800	793		ug/Kg		99	80 - 120
Bromoform	800	491		ug/Kg		61	50 - 124
Bromomethane	800	950		ug/Kg		119	57 - 148
Carbon tetrachloride	800	693		ug/Kg		87	59 - 145
Chlorobenzene	800	809		ug/Kg		101	75 - 120
Chlorobromomethane	800	741		ug/Kg		93	78 - 123
Chlorodibromomethane	800	609		ug/Kg		76	69 - 129
Chloroethane	800	839		ug/Kg		105	48 - 167
Chloroform	800	775		ug/Kg		97	78 - 125
Chloromethane	800	696		ug/Kg		87	55 - 136
cis-1,2-Dichloroethene	800	772		ug/Kg		96	70 - 130
cis-1,3-Dichloropropene	800	693		ug/Kg		87	69 - 129
Dibromomethane	800	793		ug/Kg		99	78 - 126
Dichlorobromomethane	800	580		ug/Kg		73	58 - 133
Dichlorodifluoromethane	800	700		ug/Kg		88	38 - 150
Ethylbenzene	800	814		ug/Kg		102	78 - 126
Ethylene Dibromide	800	803		ug/Kg		100	69 - 126
Hexachlorobutadiene	800	723		ug/Kg		90	68 - 134
Isopropylbenzene	800	804		ug/Kg		100	79 - 127
Methyl tert-butyl ether	800	690		ug/Kg		86	65 - 125
Methylene Chloride	800	770		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	829		ug/Kg		104	78 - 126
Naphthalene	800	577		ug/Kg		72	14 - 170
n-Butylbenzene	800	659		ug/Kg		82	78 - 128
N-Propylbenzene	800	772		ug/Kg		96	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	722		ug/Kg		90	78 - 128
Styrene	800	850		ug/Kg		106	79 - 127
tert-Butylbenzene	800	764		ug/Kg		95	71 - 136
Tetrachloroethene	800	840		ug/Kg		105	56 - 150
Toluene	800	817		ug/Kg		102	75 - 126
trans-1,2-Dichloroethene	800	768		ug/Kg		96	76 - 131
trans-1,3-Dichloropropene	800	664		ug/Kg		83	72 - 129
Trichloroethene	800	807		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	701		ug/Kg		88	47 - 165
Vinyl chloride	800	741		ug/Kg		93	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*99*		*70 - 120*
Fluorobenzene (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	800	667		ug/Kg		83	72 - 123	2	20
1,1,1-Trichloroethane	800	715		ug/Kg		89	63 - 135	2	20
1,1,2,2-Tetrachloroethane	800	783		ug/Kg		98	73 - 125	4	22
1,1,2-Trichloroethane	800	780		ug/Kg		97	77 - 124	1	18
1,1-Dichloroethane	800	800		ug/Kg		100	70 - 128	4	21
1,1-Dichloroethene	800	744		ug/Kg		93	70 - 133	3	23
1,1-Dichloropropene	800	815		ug/Kg		102	77 - 123	0	16
1,2,3-Trichlorobenzene	800	544		ug/Kg		68	61 - 130	4	23
1,2,3-Trichloropropane	800	807		ug/Kg		101	77 - 123	1	23
1,2,4-Trichlorobenzene	800	618		ug/Kg		77	61 - 130	5	22
1,2,4-Trimethylbenzene	800	761		ug/Kg		95	79 - 124	0	18
1,2-Dibromo-3-Chloropropane	800	465		ug/Kg		58	53 - 132	9	27
1,2-Dichlorobenzene	800	743		ug/Kg		93	79 - 117	2	17
1,2-Dichloroethane	800	758		ug/Kg		95	71 - 128	12	18
1,2-Dichloropropane	800	1010		ug/Kg		126	76 - 161	4	15
1,3,5-Trimethylbenzene	800	759		ug/Kg		95	80 - 125	1	18
1,3-Dichlorobenzene	800	759		ug/Kg		95	79 - 119	0	17
1,3-Dichloropropane	800	808		ug/Kg		101	77 - 123	3	19
1,4-Dichlorobenzene	800	747		ug/Kg		93	79 - 117	0	18
2,2-Dichloropropane	800	717		ug/Kg		90	56 - 144	1	21
2-Chlorotoluene	800	808		ug/Kg		101	79 - 122	4	18
4-Chlorotoluene	800	786		ug/Kg		98	80 - 122	4	18
4-Isopropyltoluene	800	711		ug/Kg		89	78 - 126	3	18
Acetone	3200	2660		ug/Kg		83	20 - 160	13	30
Benzene	800	783	*	ug/Kg		98	70 - 128	21	19
Bromobenzene	800	815		ug/Kg		102	80 - 120	3	19
Bromoform	800	525		ug/Kg		66	50 - 124	7	25
Bromomethane	800	958		ug/Kg		120	57 - 148	1	29
Carbon tetrachloride	800	723		ug/Kg		90	59 - 145	4	19
Chlorobenzene	800	809		ug/Kg		101	75 - 120	0	21
Chlorobromomethane	800	814		ug/Kg		102	78 - 123	9	19
Chlorodibromomethane	800	616		ug/Kg		77	69 - 129	1	23
Chloroethane	800	931		ug/Kg		116	48 - 167	10	53
Chloroform	800	788		ug/Kg		98	78 - 125	2	17
Chloromethane	800	751		ug/Kg		94	55 - 136	8	26
cis-1,2-Dichloroethene	800	797		ug/Kg		100	70 - 130	3	19
cis-1,3-Dichloropropene	800	677		ug/Kg		85	69 - 129	2	19
Dibromomethane	800	788		ug/Kg		98	78 - 126	1	18
Dichlorobromomethane	800	587		ug/Kg		73	58 - 133	1	19
Dichlorodifluoromethane	800	729		ug/Kg		91	38 - 150	4	26
Ethylbenzene	800	823		ug/Kg		103	78 - 126	1	23
Ethylene Dibromide	800	838		ug/Kg		105	69 - 126	4	21
Hexachlorobutadiene	800	698		ug/Kg		87	68 - 134	4	21
Isopropylbenzene	800	783		ug/Kg		98	79 - 127	3	20
Methyl tert-butyl ether	800	744		ug/Kg		93	65 - 125	8	30
Methylene Chloride	800	773		ug/Kg		97	57 - 146	0	21
m-Xylene & p-Xylene	800	838		ug/Kg		105	78 - 126	1	23
Naphthalene	800	632		ug/Kg		79	14 - 170	9	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-145824/21-A
Matrix: Solid
Analysis Batch: 145776

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene			800	659		ug/Kg		82	78 - 128	0	17
N-Propylbenzene			800	764		ug/Kg		95	81 - 127	1	20
o-Xylene			800	800		ug/Kg		100	77 - 127	0	22
sec-Butylbenzene			800	724		ug/Kg		90	78 - 128	0	17
Styrene			800	846		ug/Kg		106	79 - 127	1	21
tert-Butylbenzene			800	755		ug/Kg		94	71 - 136	1	27
Tetrachloroethene			800	815		ug/Kg		102	56 - 150	3	27
Toluene			800	807		ug/Kg		101	75 - 126	1	19
trans-1,2-Dichloroethene			800	789		ug/Kg		99	76 - 131	3	18
trans-1,3-Dichloropropene			800	683		ug/Kg		85	72 - 129	3	20
Trichloroethene			800	811		ug/Kg		101	83 - 124	0	17
Trichlorofluoromethane			800	690		ug/Kg		86	47 - 165	2	54
Vinyl chloride			800	754		ug/Kg		94	67 - 131	2	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*
Ethylbenzene-d10	*100*		*70 - 120*
Fluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*65 - 140*

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg			09/29/13 01:03	1
2-Chlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,3-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
1,4-Dichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Benzyl alcohol	ND		100		ug/Kg			09/29/13 01:03	1
1,2-Dichlorobenzene	ND		55		ug/Kg			09/29/13 01:03	1
2-Methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
3 & 4 Methylphenol	ND		200		ug/Kg			09/29/13 01:03	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg			09/29/13 01:03	1
Hexachloroethane	ND		100		ug/Kg			09/29/13 01:03	1
Nitrobenzene	ND		100		ug/Kg			09/29/13 01:03	1
Isophorone	ND		100		ug/Kg			09/29/13 01:03	1
2-Nitrophenol	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dimethylphenol	ND		100		ug/Kg			09/29/13 01:03	1
Benzoic acid	ND		2500		ug/Kg			09/29/13 01:03	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Naphthalene	ND		20		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobutadiene	ND		50		ug/Kg			09/29/13 01:03	1
4-Chloro-3-methylphenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Methylnaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
Hexachlorocyclopentadiene	ND		100		ug/Kg			09/29/13 01:03	1
2,4,6-Trichlorophenol	ND		150		ug/Kg			09/29/13 01:03	1
2,4,5-Trichlorophenol	ND		100		ug/Kg			09/29/13 01:03	1
2-Chloronaphthalene	ND		20		ug/Kg			09/29/13 01:03	1
2-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Dimethyl phthalate	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthylene	ND		20		ug/Kg			09/29/13 01:03	1
2,6-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
3-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
Acenaphthene	ND		20		ug/Kg			09/29/13 01:03	1
2,4-Dinitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
4-Nitrophenol	ND		1000		ug/Kg			09/29/13 01:03	1
Dibenzofuran	ND		100		ug/Kg			09/29/13 01:03	1
2,4-Dinitrotoluene	ND		100		ug/Kg			09/29/13 01:03	1
Diethyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Fluorene	ND		20		ug/Kg			09/29/13 01:03	1
4-Nitroaniline	ND		100		ug/Kg			09/29/13 01:03	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg			09/29/13 01:03	1
N-Nitrosodiphenylamine	ND		50		ug/Kg			09/29/13 01:03	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg			09/29/13 01:03	1
Hexachlorobenzene	ND		50		ug/Kg			09/29/13 01:03	1
Pentachlorophenol	ND		200		ug/Kg			09/29/13 01:03	1
Phenanthrene	ND		20		ug/Kg			09/29/13 01:03	1
Anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Di-n-butyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Pyrene	ND		20		ug/Kg			09/29/13 01:03	1
Butyl benzyl phthalate	ND		200		ug/Kg			09/29/13 01:03	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg			09/29/13 01:03	1
Benzo[a]anthracene	ND		20		ug/Kg			09/29/13 01:03	1
Chrysene	ND		25		ug/Kg			09/29/13 01:03	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg			09/29/13 01:03	1
Di-n-octyl phthalate	ND		500		ug/Kg			09/29/13 01:03	1
Benzo[a]pyrene	ND		30		ug/Kg			09/29/13 01:03	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg			09/29/13 01:03	1
Dibenz(a,h)anthracene	ND		40		ug/Kg			09/29/13 01:03	1
Benzo[g,h,i]perylene	ND		25		ug/Kg			09/29/13 01:03	1
Carbazole	ND		100		ug/Kg			09/29/13 01:03	1
1-Methylnaphthalene	ND		30		ug/Kg			09/29/13 01:03	1
Benzo[b]fluoranthene	ND		20		ug/Kg			09/29/13 01:03	1
Benzo[k]fluoranthene	ND		25		ug/Kg			09/29/13 01:03	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg			09/29/13 01:03	1

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

Lab Sample ID: MB 580-145952/1-A
Matrix: Solid
Analysis Batch: 146067

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	111		36 - 145		09/29/13 01:03	1
Phenol-d5	106		38 - 149		09/29/13 01:03	1
Nitrobenzene-d5	102		38 - 141		09/29/13 01:03	1
2-Fluorobiphenyl	96		42 - 140		09/29/13 01:03	1
2,4,6-Tribromophenol	72		28 - 143		09/29/13 01:03	1
Terphenyl-d14	113		42 - 151		09/29/13 01:03	1

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1240		ug/Kg		124	66 - 126
Bis(2-chloroethyl)ether	998	970		ug/Kg		97	57 - 122
2-Chlorophenol	1000	1280	*	ug/Kg		128	65 - 125
1,3-Dichlorobenzene	1000	1020		ug/Kg		102	64 - 124
1,4-Dichlorobenzene	1010	1030		ug/Kg		102	62 - 132
Benzyl alcohol	997	1080		ug/Kg		108	42 - 147
1,2-Dichlorobenzene	1010	1000		ug/Kg		99	68 - 118
2-Methylphenol	997	1030		ug/Kg		103	56 - 121
3 & 4 Methylphenol	1000	1110		ug/Kg		111	61 - 126
N-Nitrosodi-n-propylamine	1000	995		ug/Kg		99	52 - 127
Hexachloroethane	1010	1040		ug/Kg		102	56 - 131
Nitrobenzene	1020	1110		ug/Kg		109	59 - 134
Isophorone	988	1190	*	ug/Kg		121	53 - 118
2-Nitrophenol	1010	1320	*	ug/Kg		131	58 - 128
2,4-Dimethylphenol	1010	1540	*	ug/Kg		153	58 - 133
Benzoic acid	5090	5490		ug/Kg		108	10 - 130
Bis(2-chloroethoxy)methane	998	1030		ug/Kg		103	63 - 128
2,4-Dichlorophenol	1020	1330	*	ug/Kg		131	59 - 124
1,2,4-Trichlorobenzene	1000	1010		ug/Kg		101	63 - 128
Naphthalene	1010	991		ug/Kg		98	64 - 129
4-Chloroaniline	983	627		ug/Kg		64	20 - 181
Hexachlorobutadiene	1000	1010		ug/Kg		101	59 - 134
4-Chloro-3-methylphenol	1010	1210		ug/Kg		120	58 - 128
2-Methylnaphthalene	991	1010		ug/Kg		102	65 - 125
Hexachlorocyclopentadiene	1000	797		ug/Kg		80	30 - 132
2,4,6-Trichlorophenol	1010	1120		ug/Kg		111	66 - 131
2,4,5-Trichlorophenol	1010	1050		ug/Kg		104	64 - 124
2-Chloronaphthalene	1000	1010		ug/Kg		101	69 - 129
2-Nitroaniline	983	897		ug/Kg		91	58 - 133
Dimethyl phthalate	1000	1130		ug/Kg		112	65 - 125
Acenaphthylene	1000	1090		ug/Kg		109	69 - 129
2,6-Dinitrotoluene	1000	993		ug/Kg		99	65 - 125
3-Nitroaniline	987	524	*	ug/Kg		53	80 - 165
Acenaphthene	1000	974		ug/Kg		97	65 - 130
2,4-Dinitrophenol	5060	4260		ug/Kg		84	53 - 168
4-Nitrophenol	5030	4670		ug/Kg		93	47 - 172

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

Lab Sample ID: LCS 580-145952/2-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	1010	1000		ug/Kg		100	70 - 125
2,4-Dinitrotoluene	1000	1050		ug/Kg		105	57 - 122
Diethyl phthalate	1000	1040		ug/Kg		104	64 - 129
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130
Fluorene	1010	1050		ug/Kg		104	68 - 128
4-Nitroaniline	991	686	*	ug/Kg		69	70 - 150
4,6-Dinitro-2-methylphenol	5060	5330		ug/Kg		105	38 - 143
N-Nitrosodiphenylamine	1000	1180		ug/Kg		118	88 - 153
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134
Hexachlorobenzene	1000	1030		ug/Kg		103	61 - 136
Pentachlorophenol	1000	1140		ug/Kg		114	29 - 124
Phenanthrene	1000	962		ug/Kg		96	65 - 125
Anthracene	1010	1030		ug/Kg		102	73 - 123
Di-n-butyl phthalate	1000	1060		ug/Kg		106	69 - 124
Fluoranthene	1000	1070		ug/Kg		107	61 - 121
Pyrene	998	1030		ug/Kg		103	54 - 134
Butyl benzyl phthalate	1000	1080		ug/Kg		107	65 - 140
3,3'-Dichlorobenzidine	1980	1420	*	ug/Kg		71	73 - 163
Benzo[a]anthracene	1000	1020		ug/Kg		102	64 - 124
Chrysene	992	962		ug/Kg		97	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1100		ug/Kg		110	64 - 144
Di-n-octyl phthalate	1010	986		ug/Kg		98	58 - 148
Benzo[a]pyrene	1000	1040		ug/Kg		104	68 - 128
Indeno[1,2,3-cd]pyrene	998	879		ug/Kg		88	59 - 139
Dibenz(a,h)anthracene	1000	992		ug/Kg		99	57 - 142
Benzo[g,h,i]perylene	1010	1080		ug/Kg		107	57 - 142
Carbazole	1010	1060		ug/Kg		105	88 - 158
1-Methylnaphthalene	997	1040		ug/Kg		105	48 - 148
Benzo[b]fluoranthene	1000	1100		ug/Kg		110	66 - 136
Benzo[k]fluoranthene	1010	1060		ug/Kg		105	63 - 143
bis (2-chloroisopropyl) ether	993	815		ug/Kg		82	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*113*		*36 - 145*
Phenol-d5	*108*		*38 - 149*
Nitrobenzene-d5	*104*		*38 - 141*
2-Fluorobiphenyl	*97*		*42 - 140*
2,4,6-Tribromophenol	*99*		*28 - 143*
Terphenyl-d14	*110*		*42 - 151*

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1200		ug/Kg		120	66 - 126	3	26
Bis(2-chloroethyl)ether	998	943		ug/Kg		95	57 - 122	3	60
2-Chlorophenol	1000	1220		ug/Kg		121	65 - 125	5	27

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1000	996		ug/Kg		99	64 - 124	2	60
1,4-Dichlorobenzene	1010	1010		ug/Kg		99	62 - 132	3	32
Benzyl alcohol	997	1040		ug/Kg		104	42 - 147	4	60
1,2-Dichlorobenzene	1010	978		ug/Kg		97	68 - 118	2	60
2-Methylphenol	997	985		ug/Kg		99	56 - 121	4	25
3 & 4 Methylphenol	1000	1080		ug/Kg		108	61 - 126	3	27
N-Nitrosodi-n-propylamine	1000	984		ug/Kg		98	52 - 127	1	28
Hexachloroethane	1010	963		ug/Kg		95	56 - 131	7	60
Nitrobenzene	1020	1100		ug/Kg		108	59 - 134	1	60
Isophorone	988	1170		ug/Kg		118	53 - 118	2	60
2-Nitrophenol	1010	1290		ug/Kg		128	58 - 128	2	60
2,4-Dimethylphenol	1010	1470	*	ug/Kg		146	58 - 133	5	60
Benzoic acid	5090	5140		ug/Kg		101	10 - 130	7	60
Bis(2-chloroethoxy)methane	998	996		ug/Kg		100	63 - 128	3	60
2,4-Dichlorophenol	1020	1280	*	ug/Kg		126	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	994		ug/Kg		99	63 - 128	1	28
Naphthalene	1010	971		ug/Kg		96	64 - 129	2	26
4-Chloroaniline	983	553		ug/Kg		56	20 - 181	12	60
Hexachlorobutadiene	1000	999		ug/Kg		100	59 - 134	1	60
4-Chloro-3-methylphenol	1010	1200		ug/Kg		119	58 - 128	1	27
2-Methylnaphthalene	991	966		ug/Kg		97	65 - 125	4	27
Hexachlorocyclopentadiene	1000	802		ug/Kg		80	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1120		ug/Kg		110	66 - 131	0	60
2,4,5-Trichlorophenol	1010	994		ug/Kg		98	64 - 124	6	60
2-Chloronaphthalene	1000	985		ug/Kg		98	69 - 129	2	25
2-Nitroaniline	983	891		ug/Kg		91	58 - 133	1	60
Dimethyl phthalate	1000	1090		ug/Kg		109	65 - 125	3	60
Acenaphthylene	1000	1040		ug/Kg		104	69 - 129	4	28
2,6-Dinitrotoluene	1000	995		ug/Kg		99	65 - 125	0	60
3-Nitroaniline	987	509	*	ug/Kg		52	80 - 165	3	60
Acenaphthene	1000	956		ug/Kg		95	65 - 130	2	27
2,4-Dinitrophenol	5060	4020		ug/Kg		79	53 - 168	6	60
4-Nitrophenol	5030	4730		ug/Kg		94	47 - 172	1	33
Dibenzofuran	1010	1010		ug/Kg		100	70 - 125	1	60
2,4-Dinitrotoluene	1000	1070		ug/Kg		107	57 - 122	2	31
Diethyl phthalate	1000	1030		ug/Kg		103	64 - 129	1	26
4-Chlorophenyl phenyl ether	992	1030		ug/Kg		104	65 - 130	0	60
Fluorene	1010	1030		ug/Kg		102	68 - 128	2	31
4-Nitroaniline	991	755		ug/Kg		76	70 - 150	10	60
4,6-Dinitro-2-methylphenol	5060	5130		ug/Kg		101	38 - 143	4	60
N-Nitrosodiphenylamine	1000	1170		ug/Kg		117	88 - 153	0	60
4-Bromophenyl phenyl ether	1000	1020		ug/Kg		102	64 - 134	0	60
Hexachlorobenzene	1000	1050		ug/Kg		104	61 - 136	2	60
Pentachlorophenol	1000	1120		ug/Kg		112	29 - 124	2	68
Phenanthrene	1000	951		ug/Kg		95	65 - 125	1	28
Anthracene	1010	1020		ug/Kg		102	73 - 123	0	27
Di-n-butyl phthalate	1000	1050		ug/Kg		105	69 - 124	1	60
Fluoranthene	1000	1070		ug/Kg		107	61 - 121	0	36

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

Lab Sample ID: LCSD 580-145952/3-A
Matrix: Solid
Analysis Batch: 146067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene	998	1010		ug/Kg		102	54 - 134	2	31
Butyl benzyl phthalate	1000	1040		ug/Kg		104	65 - 140	3	60
3,3'-Dichlorobenzidine	1980	1300	*	ug/Kg		66	73 - 163	8	60
Benzo[a]anthracene	1000	987		ug/Kg		98	64 - 124	3	27
Chrysene	992	942		ug/Kg		95	71 - 126	2	26
Bis(2-ethylhexyl) phthalate	1000	1060		ug/Kg		106	64 - 144	4	60
Di-n-octyl phthalate	1010	972		ug/Kg		97	58 - 148	1	31
Benzo[a]pyrene	1000	1000		ug/Kg		100	68 - 128	3	30
Indeno[1,2,3-cd]pyrene	998	823		ug/Kg		82	59 - 139	7	29
Dibenz(a,h)anthracene	1000	902		ug/Kg		90	57 - 142	10	30
Benzo[g,h,i]perylene	1010	1040		ug/Kg		103	57 - 142	4	28
Carbazole	1010	1040		ug/Kg		103	88 - 158	2	60
1-Methylnaphthalene	997	1010		ug/Kg		101	48 - 148	3	30
Benzo[b]fluoranthene	1000	1090		ug/Kg		108	66 - 136	1	31
Benzo[k]fluoranthene	1010	1080		ug/Kg		108	63 - 143	2	31
bis (2-chloroisopropyl) ether	993	759		ug/Kg		76	44 - 140	7	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*104*		*36 - 145*
Phenol-d5	*101*		*38 - 149*
Nitrobenzene-d5	*101*		*38 - 141*
2-Fluorobiphenyl	*93*		*42 - 140*
2,4,6-Tribromophenol	*95*		*28 - 143*
Terphenyl-d14	*105*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg			09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg			09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg			09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*		*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*		*09/26/13 18:50*	*1*

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

Lab Sample ID: LCS 580-145585/2-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A
Matrix: Solid
Analysis Batch: 145848

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.0929		mg/Kg		93	40 - 140	12	20
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-145876/1-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L			09/30/13 10:19	1
Barium	ND		0.010		mg/L			09/30/13 10:19	1
Cadmium	ND		0.010		mg/L			09/30/13 10:19	1
Chromium	ND		0.025		mg/L			09/30/13 10:19	1
Lead	ND		0.030		mg/L			09/30/13 10:19	1
Selenium	ND		0.10		mg/L			09/30/13 10:19	1
Silver	ND		0.050		mg/L			09/30/13 10:19	1

Lab Sample ID: LCS 580-145876/2-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			4.00	4.19		mg/L		105	80 - 120		
Barium			4.00	3.99		mg/L		100	80 - 120		
Cadmium			0.100	0.103		mg/L		103	80 - 120		
Chromium			0.400	0.401		mg/L		100	80 - 120		
Lead			1.00	0.980		mg/L		98	80 - 120		
Selenium			4.00	4.26		mg/L		107	80 - 120		
Silver			0.600	0.573		mg/L		95	80 - 120		

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

Lab Sample ID: LCSD 580-145876/3-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.28		mg/L		107	80 - 120	2	20
Barium	4.00	4.01		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.104		mg/L		104	80 - 120	1	20
Chromium	0.400	0.408		mg/L		102	80 - 120	2	20
Lead	1.00	1.01		mg/L		101	80 - 120	3	20
Selenium	4.00	4.34		mg/L		109	80 - 120	2	20
Silver	0.600	0.591		mg/L		99	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-145876/1-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L			09/27/13 14:33	1

Lab Sample ID: LCS 580-145876/2-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample
Prep Type: TCLP

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0200	0.0171		mg/L		85	80 - 120

Lab Sample ID: LCSD 580-145876/3-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0200	0.0168		mg/L		84	80 - 120	2	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40422-1 DU
Matrix: Solid
Analysis Batch: 145731

Client Sample ID: SP-A7E2-092013
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	90		89		%		1	20
Percent Moisture	9.8		11		%		13	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40422-1

Client Sample ID: SP-A7E2-092013 — **Lab Sample ID: 580-40422-1**
Date Collected: 09/20/13 08:45 — **Matrix: Solid**
Date Received: 09/21/13 10:30 — **Percent Solids: 90.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	145776	09/25/13 18:42	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145731	09/24/13 17:22	JJP	TAL SEA

Client Sample ID: SP-A7E1-092013 — **Lab Sample ID: 580-40422-2**
Date Collected: 09/20/13 08:45 — **Matrix: Solid**
Date Received: 09/21/13 10:30 — **Percent Solids: 93.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	146067	09/29/13 05:53	CGM	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 20:32	SGH	TAL SEA
TCLP	Analysis	7470A		1	146027	09/27/13 14:50	PAB	TAL SEA
TCLP	Analysis	6010B		1	146143	09/30/13 10:56	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145731	09/24/13 17:22	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

TestAmerica Job ID: 580-40422-1

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: 580-40422-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40422-1	SP-A7E2-092013	Solid	09/20/13 08:45	09/21/13 10:30
580-40422-2	SP-A7E1-092013	Solid	09/20/13 08:45	09/21/13 10:30

BNSF RAILWAY

CHAIN OF CUSTODY

LAB WORK ORDER: 40922

LABORATORY INFORMATION			
Laboratory: TEST AMERICA	Project Manager: KRIS ALLEN		
Address: 5755 8TH STREET EAST	Phone:		
City/State/ZIP: SPOKANE, WA 98424	Fax:		

SHIPMENT INFORMATION

Shipment Method:

Tracking Number:

BNSF PROJECT INFORMATION	
BNSF Project Number: 1396110.04	Project State of Origin: WASHINGTON
BNSF Project Name: PARKWATER	Project City: SPOKANE
BNSF Contact: BRUCE SHEPPARD	BNSF Work Order No.: TTO101-N10

CONSULTANT INFORMATION	
Company: KENNEDY/JENKS CONSULTANTS	Project Number: 1396110.04
Address: 32001 32ND AVE S, SUITE 100	Project Manager: HOWARD YOUNG
City/State/ZIP: FEDERAL WAY, WA 98001	Email: howardyoung@kennedyjenks.com
	Phone: 253-835-6400 Fax: 253-952-3435

TURNAROUND TIME

- ☐ 1-day Rush
- ☐ 2-day Rush
- ☒ 3-day Rush
- ☐ 5- to 8-day Rush
- ☐ Standard 10-Day
- ☒ Other SEE COMMENT

DELIVERABLES

- ☐ BNSF Standard (Level II)
- ☐ Level III
- ☐ Level IV
- ☒ Other Deliverables? K/J Custom EDD
- ☒ EDD Req. Format?

SAMPLE INFORMATION / **METHODS FOR ANALYSIS**

	Sample identification	Containers	Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS (SW1311/6010)	SEMI VOLATILE ORGANICS HY (8270)	PCBs (SW8082)	VOLATILE ORGANIC COMPOUNDS (8260)					COMMENTS	LAB USE
1	SP-A7E2-092013	1	9/20/13	8:45	HY	NA	G	S				X					~~3-DAY RUSH~~ HY	1
2	SP-A7E1-092013	2	9/20/13	8:45	HY	NA	C	S	X	X	X							2
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Cooler/TB Dig/IR cor 4.7 unc 4.7 (A1)
Cooler Dsc blue/white @ Lab
Wet/Packs Packing bubble
wet ice — fedex sat

Cooler/TB Dig/IR cor 2.7 unc 2.6
Cooler Dsc blue/white @ Lab
Wet/Packs Packing bubble
wet ice — fedex sat

580-40422 Chain of Custody

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature] 1540	9/20/13 14:40	[signature]	9/20/13 1450
[signature]	9/20/13 1500	[signature]	9/21/13 1030

Received by Laboratory: | Date/Time: | Lab Remarks: | Lab: Custody Intact? ☐ Yes ☐ No

Comments and Special Analytical Requirements:
TCLP METALS - 3 DAY RUSH
VOCs, SVOCs, PCBs - 3 DAY RUSH

Custody Seal No.: | BNSF COC No.:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES — DUPLICATE - CONSULTANT — TAL-1001 (06/08)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40422-1

Login Number: 40422

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: 580-40420-1
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:
10/7/2013 5:09:19 PM

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

Table of Contents

Case Narrative

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

TestAmerica Job ID: 580-40420-1

Job ID: 580-40420-1

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 2.7º C and 4.7º C.

GC Semi VOA - Method(s) NWTPH-Dx
In analytical batch 146589, the method blank for preparation batch 146444 contained #2 Diesel Fuel (C10-C24) and 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: SP-RB1-092013 (580-40420-11), 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 heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, 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
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Definitions/Glossary

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

TestAmerica Job ID: 580-40420-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40420-1

Client Sample ID: SP-RB1-092013
Date Collected: 09/20/13 12:30
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40420-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13	B Y	0.12		mg/L		10/03/13 09:27	10/04/13 20:11	1
Motor Oil (>C24-C36)	0.35	B Y	0.24		mg/L		10/03/13 09:27	10/04/13 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*50 - 150*	*10/03/13 09:27*	*10/04/13 20:11*	*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		09/23/13 10:32	09/23/13 16:23	5
Barium	ND		0.0060		mg/L		09/23/13 10:32	09/23/13 16:23	5
Cadmium	ND		0.0020		mg/L		09/23/13 10:32	09/23/13 16:23	5
Chromium	ND		0.0020		mg/L		09/23/13 10:32	09/23/13 16:23	5
Lead	ND		0.0020		mg/L		09/23/13 10:32	09/23/13 16:23	5

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)	0.159		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*
o-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	%Rec. Limits
#2 Diesel (C10-C24)	4.00	3.27		mg/L		82	70 - 140
Motor Oil (>C24-C36)	4.00	3.76		mg/L		94	66 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-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	%Rec. Limits	RPD	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*
o-Terphenyl	*85*		*50 - 150*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-145567/22-A
Matrix: Water
Analysis Batch: 145639

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 145567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/23/13 10:32	09/23/13 14:51	5
Barium	ND		0.0060		mg/L		09/23/13 10:32	09/23/13 14:51	5
Cadmium	ND		0.0020		mg/L		09/23/13 10:32	09/23/13 14:51	5
Chromium	ND		0.0020		mg/L		09/23/13 10:32	09/23/13 14:51	5
Lead	ND		0.0020		mg/L		09/23/13 10:32	09/23/13 14:51	5

Lab Sample ID: LCS 580-145567/23-A
Matrix: Water
Analysis Batch: 145639

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	3.93		mg/L		98	80 - 120

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

Lab Sample ID: LCS 580-145567/23-A
Matrix: Water
Analysis Batch: 145639

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	4.00	3.80		mg/L		95	80 - 120
Cadmium	0.100	0.0894		mg/L		89	80 - 120
Chromium	0.400	0.386		mg/L		96	80 - 120
Lead	1.00	0.960		mg/L		96	80 - 120

Lab Sample ID: LCSD 580-145567/24-A
Matrix: Water
Analysis Batch: 145639

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 145567

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	3.91		mg/L		98	80 - 120	0	20
Barium	4.00	3.76		mg/L		94	80 - 120	1	20
Cadmium	0.100	0.0904		mg/L		90	80 - 120	1	20
Chromium	0.400	0.389		mg/L		97	80 - 120	1	20
Lead	1.00	0.953		mg/L		95	80 - 120	1	20

Lab Chronicle

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

TestAmerica Job ID: 580-40420-1

Client Sample ID: SP-RB1-092013
Date Collected: 09/20/13 12:30
Date Received: 09/21/13 10:30

Lab Sample ID: 580-40420-11
Matrix: Water

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 20:11	JL1	TAL SEA
Total Recoverable	Prep	3005A			145567	09/23/13 10:32	PAB	TAL SEA
Total Recoverable	Analysis	6020		5	145639	09/23/13 16:23	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: BNSF Parkwater

TestAmerica Job ID: 580-40420-1

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: BNSF Parkwater

TestAmerica Job ID: 580-40420-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40420-11	SP-RB1-092013	Water	09/20/13 12:30	09/21/13 10:30

BNSF RAILWAY — CHAIN OF CUSTODY

LAB WORK ORDER: 40420

LABORATORY INFORMATION

Laboratory: TEST AMERICA
Project Manager: KRIS ALLEN
Address: 5755 8TH STREET EAST
Phone:
City/State/ZIP: TACOMA, WA 98424
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

10/7/2013

BNSF PROJECT INFORMATION

BNSF Project Number: 1396110.04
BNSF Project Name: PARKWATE
BNSF Contact: BRUCE SHEPPARD
Project State of Origin: WASHINGTON
Project City: SPOKANE
BNSF Work Order No.: TTD101-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Project Manager: HOWARD YOUNG
Address: 32001 32ND AVES, SUITE 100
Email: howard.young@kennedyjenks.com
City/State/ZIP: FEDERAL WAY, WA 98001
Phone: 253-835-6400
Fax: 253-952-3435
Project Number:

TURNAROUND TIME

- [X] 1-day Rush
- [ ] 2-day Rush
- [ ] 3-day Rush
- [ ] 5- to 8-day Rush
- [ ] Standard 10-Day
- [X] Other 24 HR RUSH

DELIVERABLES

- [X] BNSF Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [X] Other Deliverables? K/J CUSTOM EDD
- [X] EDD Req, Format? EIM

METHODS FOR ANALYSIS

As, Cd, Ba, Pb, Total Cr by EPA 6020 — NWTPH-Dx Diesel, Oil

Cooler/TB Dig/IR cor 2.7 une 2.5
Cooler Dsc ice/blue/white @ Lab
Wet/Packs Packing bubble
WICS. fedex sat

Cooler/TB Dig/IR cor 4.7 une 4.7 A1
Cooler Dsc ice/blue/white @ Lab
Wet/Packs Packing bubble
WICS. fedex sat.

SAMPLE INFORMATION

	Sample identification	Containers	Sample Collection Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
1	WFE-SW8-091913	1	9/19/13	1747	DR	N	G	S	24-HOUR RUSH	1
2	WFE-SW9-091913	1	9/19/13	1742					"	2
3	WFE-SW10-091913	1	9/19/13	1753					"	3
4	WFE-BS9-092013	1	9/20/13	0815					"	4
5	WFE-BS10-091913	1	9/19/13	1735					"	5
6	WFE-BS11-091913	1	9/19/13	1739					"	6
7	WFE-BS12-091913	1	9/19/13	1750	↓				"	7
8	WFE-BS112-091913	1	9/19/13	1750	DR				"	8
9	WFE-BS13-091913	1	9/19/13	1815	HY	↓	↓	↓	"	9
10	WFE-BS14-091913	1	9/19/13	1820	HY	N	G	S	"	10
11	SP-RB1-092013	3	9/20/13	12:30	HX	N	G	W	STANDARD TURN AROUND	11
12										
13										
14										
15										

Relinquished By:	Date/Time: 9/20/13 14:40	Received By:	Date/Time: 9/20/13 1440
Relinquished By:	Date/Time: 9/20/13 1506	Received By:	Date/Time: 9/21/13 1030
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received by Laboratory:	Date/Time:	Lab Remarks:	

Comments and Special Analytical Requirements:
SP-RB1-092013 IS A RINSATE BLANK, RUN ON STANDARD TAT. ALL OTHER SAMPLES RUN ON 24-HOUR RUSH TAT.

Custody Seal No.:
BNSF COC No.:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
DUPLICA

580-40420 Chain of Custody

TAL-1001 (06/08)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40420-1

Login Number: 40420

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	

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: 580-40468-1
Client Project/Site: BNSF Parkwater

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

Attn: Terry Parks

Kristine D. Allen

Authorized for release by:
10/21/2013 5:24:03 PM

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

Table of Contents

Case Narrative

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

TestAmerica Job ID: 580-40468-1

Job ID: 580-40468-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 9/25/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

Except:

Bulk soil was received for 8260 analysis. The laboratory will extract the sample into Methanol.

Per a conversation with the client this job will be on a standard 10 day turn around and the TCLP metals will be run by 6010 not by 6020 as the COC indicates.

GC/MS VOA - Method(s) 8260B
The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 146325 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

The following sample(s) was received as bulk soil and extracted into methanol more than 48 hours after sampling. The data have been qualified and reported.

No other analytical or quality issues were noted.

GC Semi VOA
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: BNSF Parkwater

TestAmerica Job ID: 580-40468-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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: Kennedy/Jenks Consultants
Project/Site: BNSF Parkwater

TestAmerica Job ID: 580-40468-1

Client Sample ID: Koch-SP1A-092413
Date Collected: 09/24/13 08:25
Date Received: 09/25/13 09:50

Lab Sample ID: 580-40468-1
Matrix: Solid
Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1
PCB-1221	ND		0.012		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1
PCB-1232	ND		0.012		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1
PCB-1242	ND		0.011		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1
PCB-1248	ND		0.011		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1
PCB-1254	ND		0.011		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1
PCB-1260	ND		0.011		mg/Kg	☼	09/30/13 10:47	10/03/13 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*	*09/30/13 10:47*	*10/03/13 12:49*	*1*
DCB Decachlorobiphenyl	*60*		*50 - 140*	*09/30/13 10:47*	*10/03/13 12:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**90**		0.10		%			09/30/13 12:12	1
Percent Moisture	**9.5**		0.10		%			09/30/13 12:12	1

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

TestAmerica Job ID: 580-40468-1

Client Sample ID: Koch-SP1B-092413
Date Collected: 09/24/13 08:15
Date Received: 09/25/13 09:50

Lab Sample ID: 580-40468-2
Matrix: Solid
Percent Solids: 88.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,1,1-Trichloroethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,1-Dichloroethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,1-Dichloropropene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2,3-Trichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2,3-Trichloropropane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2,4-Trichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2,4-Trimethylbenzene	**430**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2-Dichloroethane	ND	H	17		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,3,5-Trimethylbenzene	**210**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,3-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,3-Dichloropropane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
1,4-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
2,2-Dichloropropane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
2-Chlorotoluene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
4-Chlorotoluene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
4-Isopropyltoluene	**57**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Acetone	ND	H	440		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Benzene	**23**	**H**	17		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Bromobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Bromoform	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Bromomethane	ND	H	150		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Chlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Chlorobromomethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Chloroethane	ND	H	440		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Chloroform	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Chloromethane	ND	H	440		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
cis-1,2-Dichloroethene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
cis-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Dibromomethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Dichlorobromomethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Dichlorodifluoromethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Ethylbenzene	**95**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Ethylene Dibromide	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Hexachlorobutadiene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Isopropylbenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Methyl tert-butyl ether	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Methylene Chloride	ND	H	17		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
m-Xylene & p-Xylene	**560**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Naphthalene	**150**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
n-Butylbenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1

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

TestAmerica Job ID: 580-40468-1

Client Sample ID: Koch-SP1B-092413
Date Collected: 09/24/13 08:15
Date Received: 09/25/13 09:50

Lab Sample ID: 580-40468-2
Matrix: Solid
Percent Solids: 88.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	**48**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
o-Xylene	**340**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
sec-Butylbenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Styrene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
tert-Butylbenzene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Tetrachloroethene	ND	H	22		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Toluene	**83**	**H**	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
trans-1,2-Dichloroethene	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
trans-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Trichloroethene	ND	H	17		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Trichlorofluoromethane	ND	H	44		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1
Vinyl chloride	ND	H	8.7		ug/Kg	☼	09/26/13 16:35	10/02/13 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*	*09/26/13 16:35*	*10/02/13 07:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 120*	*09/26/13 16:35*	*10/02/13 07:31*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*09/26/13 16:35*	*10/02/13 07:31*	*1*
Trifluorotoluene (Surr)	*90*		*65 - 140*	*09/26/13 16:35*	*10/02/13 07:31*	*1*
Dibromofluoromethane (Surr)	*82*		*75 - 125*	*09/26/13 16:35*	*10/02/13 07:31*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**88**		0.10		%			09/28/13 16:01	1
Percent Moisture	**12**		0.10		%			09/28/13 16:01	1

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

TestAmerica Job ID: 580-40468-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-146302/1-A
Matrix: Solid
Analysis Batch: 146325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,1,1-Trichloroethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,1,2-Trichloroethane	ND		12		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,1-Dichloroethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,1-Dichloroethene	ND		20		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,1-Dichloropropene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2,3-Trichloropropane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2-Dichlorobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2-Dichloroethane	ND		16		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,2-Dichloropropane	ND		12		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,3-Dichlorobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,3-Dichloropropane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
1,4-Dichlorobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
2,2-Dichloropropane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
2-Chlorotoluene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
4-Chlorotoluene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
4-Isopropyltoluene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Acetone	ND		400		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Benzene	ND		16		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Bromobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Bromoform	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Bromomethane	ND		140		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Carbon tetrachloride	ND		20		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Chlorobenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Chlorobromomethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Chlorodibromomethane	ND		20		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Chloroethane	ND		400		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Chloroform	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Chloromethane	ND		400		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
cis-1,2-Dichloroethene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
cis-1,3-Dichloropropene	ND		16		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Dibromomethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Dichlorobromomethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Dichlorodifluoromethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Ethylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Ethylene Dibromide	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Hexachlorobutadiene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Isopropylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Methyl tert-butyl ether	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Methylene Chloride	ND		16		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
m-Xylene & p-Xylene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Naphthalene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-146302/1-A
Matrix: Solid
Analysis Batch: 146325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
N-Propylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
o-Xylene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
sec-Butylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Styrene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
tert-Butylbenzene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Tetrachloroethene	ND		20		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Toluene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
trans-1,2-Dichloroethene	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
trans-1,3-Dichloropropene	ND		16		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Trichloroethene	ND		16		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Trichlorofluoromethane	ND		40		ug/Kg		10/01/13 16:25	10/02/13 00:23	1
Vinyl chloride	ND		8.0		ug/Kg		10/01/13 16:25	10/02/13 00:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*	*10/01/13 16:25*	*10/02/13 00:23*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*	*10/01/13 16:25*	*10/02/13 00:23*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*	*10/01/13 16:25*	*10/02/13 00:23*	*1*
Trifluorotoluene (Surr)	*100*		*65 - 140*	*10/01/13 16:25*	*10/02/13 00:23*	*1*
Dibromofluoromethane (Surr)	*78*		*75 - 125*	*10/01/13 16:25*	*10/02/13 00:23*	*1*

Lab Sample ID: LCS 580-146302/2-A
Matrix: Solid
Analysis Batch: 146325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	668		ug/Kg		83	72 - 123
1,1,1-Trichloroethane	800	672		ug/Kg		84	63 - 135
1,1,2,2-Tetrachloroethane	800	722		ug/Kg		90	73 - 125
1,1,2-Trichloroethane	800	752		ug/Kg		94	77 - 124
1,1-Dichloroethane	800	793		ug/Kg		99	70 - 128
1,1-Dichloroethene	800	696		ug/Kg		87	70 - 133
1,1-Dichloropropene	800	784		ug/Kg		98	77 - 123
1,2,3-Trichlorobenzene	800	727		ug/Kg		91	61 - 130
1,2,3-Trichloropropane	800	693		ug/Kg		87	77 - 123
1,2,4-Trichlorobenzene	800	730		ug/Kg		91	61 - 130
1,2,4-Trimethylbenzene	800	825		ug/Kg		103	79 - 124
1,2-Dibromo-3-Chloropropane	800	559		ug/Kg		70	53 - 132
1,2-Dichlorobenzene	800	775		ug/Kg		97	79 - 117
1,2-Dichloroethane	800	657		ug/Kg		82	71 - 128
1,2-Dichloropropane	800	1050		ug/Kg		131	76 - 161
1,3,5-Trimethylbenzene	800	820		ug/Kg		103	80 - 125
1,3-Dichlorobenzene	800	756		ug/Kg		94	79 - 119
1,3-Dichloropropane	800	744		ug/Kg		93	77 - 123
1,4-Dichlorobenzene	800	757		ug/Kg		95	79 - 117
2,2-Dichloropropane	800	601		ug/Kg		75	56 - 144
2-Chlorotoluene	800	785		ug/Kg		98	79 - 122
4-Chlorotoluene	800	807		ug/Kg		101	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-146302/2-A
Matrix: Solid
Analysis Batch: 146325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	801		ug/Kg		100	78 - 126
Acetone	3200	2710		ug/Kg		85	20 - 160
Benzene	800	760		ug/Kg		95	70 - 128
Bromobenzene	800	789		ug/Kg		99	80 - 120
Bromoform	800	500		ug/Kg		63	50 - 124
Bromomethane	800	662		ug/Kg		83	57 - 148
Carbon tetrachloride	800	629		ug/Kg		79	59 - 145
Chlorobenzene	800	760		ug/Kg		95	75 - 120
Chlorobromomethane	800	756		ug/Kg		95	78 - 123
Chlorodibromomethane	800	642		ug/Kg		80	69 - 129
Chloroethane	800	712		ug/Kg		89	48 - 167
Chloroform	800	766		ug/Kg		96	78 - 125
Chloromethane	800	818		ug/Kg		102	55 - 136
cis-1,2-Dichloroethene	800	728		ug/Kg		91	70 - 130
cis-1,3-Dichloropropene	800	740		ug/Kg		92	69 - 129
Dibromomethane	800	660		ug/Kg		82	78 - 126
Dichlorobromomethane	800	608		ug/Kg		76	58 - 133
Dichlorodifluoromethane	800	726		ug/Kg		91	38 - 150
Ethylbenzene	800	791		ug/Kg		99	78 - 126
Ethylene Dibromide	800	706		ug/Kg		88	69 - 126
Hexachlorobutadiene	800	747		ug/Kg		93	68 - 134
Isopropylbenzene	800	779		ug/Kg		97	79 - 127
Methyl tert-butyl ether	800	709		ug/Kg		89	65 - 125
Methylene Chloride	800	767		ug/Kg		96	57 - 146
m-Xylene & p-Xylene	800	775		ug/Kg		97	78 - 126
Naphthalene	800	729		ug/Kg		91	14 - 170
n-Butylbenzene	800	843		ug/Kg		105	78 - 128
N-Propylbenzene	800	821		ug/Kg		103	81 - 127
o-Xylene	800	775		ug/Kg		97	77 - 127
sec-Butylbenzene	800	837		ug/Kg		105	78 - 128
Styrene	800	803		ug/Kg		100	79 - 127
tert-Butylbenzene	800	814		ug/Kg		102	71 - 136
Tetrachloroethene	800	750		ug/Kg		94	56 - 150
Toluene	800	765		ug/Kg		96	75 - 126
trans-1,2-Dichloroethene	800	779		ug/Kg		97	76 - 131
trans-1,3-Dichloropropene	800	695		ug/Kg		87	72 - 129
Trichloroethene	800	821		ug/Kg		103	83 - 124
Trichlorofluoromethane	800	700		ug/Kg		87	47 - 165
Vinyl chloride	800	843		ug/Kg		105	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*
4-Bromofluorobenzene (Surr)	*91*		*70 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Trifluorotoluene (Surr)	*99*		*65 - 140*
Dibromofluoromethane (Surr)	*102*		*75 - 125*

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

Lab Sample ID: MB 580-146130/1-A
Matrix: Solid
Analysis Batch: 146461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146130

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg		09/30/13 10:47	10/03/13 11:20	1
PCB-1221	ND		0.011		mg/Kg		09/30/13 10:47	10/03/13 11:20	1
PCB-1232	ND		0.011		mg/Kg		09/30/13 10:47	10/03/13 11:20	1
PCB-1242	ND		0.010		mg/Kg		09/30/13 10:47	10/03/13 11:20	1
PCB-1248	ND		0.010		mg/Kg		09/30/13 10:47	10/03/13 11:20	1
PCB-1254	ND		0.010		mg/Kg		09/30/13 10:47	10/03/13 11:20	1
PCB-1260	ND		0.010		mg/Kg		09/30/13 10:47	10/03/13 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*45 - 135*	*09/30/13 10:47*	*10/03/13 11:20*	*1*
DCB Decachlorobiphenyl	*84*		*50 - 140*	*09/30/13 10:47*	*10/03/13 11:20*	*1*

Lab Sample ID: LCS 580-146130/2-A
Matrix: Solid
Analysis Batch: 146461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146130

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0718		mg/Kg		72	40 - 140		
PCB-1260			0.100	0.0690		mg/Kg		69	60 - 130		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene			*62*		*45 - 135*
DCB Decachlorobiphenyl			*83*		*50 - 140*

Lab Sample ID: LCSD 580-146130/3-A
Matrix: Solid
Analysis Batch: 146461

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146130

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.0771		mg/Kg		77	40 - 140	7	20
PCB-1260			0.100	0.0786		mg/Kg		79	60 - 130	13	20

Surrogate			*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene			*63*		*45 - 135*
DCB Decachlorobiphenyl			*90*		*50 - 140*

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-40468-1 DU
Matrix: Solid
Analysis Batch: 146148

Client Sample ID: Koch-SP1A-092413
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	90			89		%				1	20
Percent Moisture	9.5			11		%				11	20

Lab Chronicle

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

TestAmerica Job ID: 580-40468-1

Client Sample ID: Koch-SP1A-092413

Lab Sample ID: 580-40468-1

Date Collected: 09/24/13 08:25
Matrix: Solid
Date Received: 09/25/13 09:50
Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			146130	09/30/13 10:47	WW1	TAL SEA
Total/NA	Analysis	8082		1	146461	10/03/13 12:49	SGH	TAL SEA
Total/NA	Analysis	D 2216		1	146148	09/30/13 12:12	JJP	TAL SEA

Client Sample ID: Koch-SP1B-092413

Lab Sample ID: 580-40468-2

Date Collected: 09/24/13 08:15
Matrix: Solid
Date Received: 09/25/13 09:50
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			146302	09/26/13 16:35	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146325	10/02/13 07:31	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	146059	09/28/13 16:01	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: BNSF Parkwater

TestAmerica Job ID: 580-40468-1

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: BNSF Parkwater

TestAmerica Job ID: 580-40468-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40468-1	Koch-SP1A-092413	Solid	09/24/13 08:25	09/25/13 09:50
580-40468-2	Koch-SP1B-092413	Solid	09/24/13 08:15	09/25/13 09:50

LAB WORK ORDER: 40468

BNSF RAILWAY

CHAIN OF CUSTODY

LABORATORY INFORMATION

Laboratory: Test America
Project Manager: Kris Allen
Address: 5755 8th St E
Phone: 253-922-2310
City/State/ZIP: Tacoma, WA 98424
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 1396110.04
Project State of Origin: WA
BNSF Project Name: Parkwater
Project City: Spokane
BNSF Contact: Bruce Sheppard
BNSF Work Order No.: TT0101-N10

CONSULTANT INFORMATION

Project Number: 1396110.04
Company: Kennedy Jenks Consultants
Project Manager: Howard Young
Address: 32001 32nd Ave S Suite 100
Email: howardyoung@kennedyjenks.com
City/State/ZIP: Federal Way WA 98001
Phone: 253-835-6400
Fax: 253-952-3435

TURNAROUND TIME

- ☐ 1-day Rush
- ☐ 2-day Rush
- ☑ 3-day Rush
- ☐ 5- to 8-day Rush
- ☐ Standard 10-Day
- ☐ Other ______

DELIVERABLES

- ☑ BNSF Standard (Level II)
- ☐ Level III
- ☐ Level IV
- ☑ Other Deliverables? K/J EDD Custom
- ☑ EDD Req, Format? EIM

SAMPLE INFORMATION

	Sample Identification	Containers	Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP Metals (As, Pb, Cd, Cr, Ba, Hg, Se, Ag) (1311/6020)	Semivolatile Organics full list (8270)	PCBs (8082)	VOCs full list (8260)				COMMENTS	LAB USE
1	Koch-SP1A-092413	2	9/24/13	0825	MJW	NA	Comp	S	✓	✓	✓					Composited in Field	-1
2	Koch-SP1B-092413	1	9/24/13	0815	MJW	NA	Grab	S				✓					-2
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

580-40468 Chain of Custody

Cooler/TB Dig/IR cor 2.7 unc 2.7
Cooler Dsc by blue wh @ Lab —
Wet/Packs w/o Packing bubble
Full & P.O.

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	9/24/13-1445	[signature] Stapleton	9-24-13 1420
[signature] Stapleton	9-24-13 16:00	Cathy Gr[illegible]	9/25/13 9:50

Received by Laboratory: | Date/Time: | Lab Remarks: | Lab: Custody Intact? ☐ Yes ☐ No

Comments and Special Analytical Requirements:

Custody Seal No.:
BNSF COC No:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES | DUPLICATE - CONSULTANT

TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40468-1

Login Number: 40468

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 number labels on containers.
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	No MeOH vials receive for Volatiles.
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: 580-40372-1
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:
10/2/2013 5:18:58 PM

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

Table of Contents

Job ID: 580-40372-1

Laboratory: TestAmerica Seattle

Narrative

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 1.2º C.

GC/MS VOA - Method(s) 8260B
Surrogate recovery for the following sample(s) was outside control limits: D-DU51 (580-40337-9), D-DU51 (580-40337-9 MS), D-DU51 (580-40337-9 MSD). Evidence of matrix interference is present surrogate low in parent sample as on MS/MSD; therefore, re-extraction and/or re-analysis was not performed.

The following sample(s) was received as bulk soil and extracted into methanol by the laboratory more than 48 hours after sampling: RLT-SP2-091813 (580-40372-2). The data has been qualified and reported.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C
A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCS/LCSD associated with prep batch 145548 had 2 analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

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.

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Client Sample ID: RLT-SP1-091813
Date Collected: 09/18/13 09:06
Date Received: 09/19/13 09:30

Lab Sample ID: 580-40372-1
Matrix: Solid
Percent Solids: 90.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Bis(2-chloroethyl)ether	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2-Chlorophenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
1,3-Dichlorobenzene	ND		250		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
1,4-Dichlorobenzene	ND		250		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzyl alcohol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
1,2-Dichlorobenzene	ND		280		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2-Methylphenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
3 & 4 Methylphenol	ND		1000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
N-Nitrosodi-n-propylamine	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Hexachloroethane	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Nitrobenzene	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Isophorone	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2-Nitrophenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,4-Dimethylphenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzoic acid	ND		13000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Bis(2-chloroethoxy)methane	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,4-Dichlorophenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
1,2,4-Trichlorobenzene	ND		250		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Naphthalene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4-Chloroaniline	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Hexachlorobutadiene	ND		250		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4-Chloro-3-methylphenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2-Methylnaphthalene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Hexachlorocyclopentadiene	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,4,6-Trichlorophenol	ND		760		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,4,5-Trichlorophenol	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2-Chloronaphthalene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2-Nitroaniline	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Dimethyl phthalate	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Acenaphthylene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,6-Dinitrotoluene	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
3-Nitroaniline	ND	*	510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Acenaphthene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,4-Dinitrophenol	ND		5100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4-Nitrophenol	ND		5100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Dibenzofuran	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
2,4-Dinitrotoluene	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Diethyl phthalate	ND		1000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4-Chlorophenyl phenyl ether	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Fluorene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4-Nitroaniline	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4,6-Dinitro-2-methylphenol	ND		5100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
N-Nitrosodiphenylamine	ND		250		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
4-Bromophenyl phenyl ether	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Hexachlorobenzene	ND		250		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Pentachlorophenol	ND		1000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Phenanthrene	**110**		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Anthracene	ND		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Client Sample ID: RLT-SP1-091813
Date Collected: 09/18/13 09:06
Date Received: 09/19/13 09:30

Lab Sample ID: 580-40372-1
Matrix: Solid
Percent Solids: 90.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		2500		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Fluoranthene	**210**		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Pyrene	**210**		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Butyl benzyl phthalate	ND		1000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
3,3'-Dichlorobenzidine	ND	*	1000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzo[a]anthracene	**170**		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Chrysene	**160**		130		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Bis(2-ethylhexyl) phthalate	ND		3000		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Di-n-octyl phthalate	ND		2500		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzo[a]pyrene	**180**		150		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Indeno[1,2,3-cd]pyrene	ND		200		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Dibenz(a,h)anthracene	ND		200		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzo[g,h,i]perylene	**200**		130		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Carbazole	ND		510		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
1-Methylnaphthalene	ND		150		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzo[b]fluoranthene	**180**		100		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
Benzo[k]fluoranthene	ND		130		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5
bis (2-chloroisopropyl) ether	ND		1300		ug/Kg	☼	09/22/13 18:06	09/29/13 20:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*71*		*36 - 145*	*09/22/13 18:06*	*09/29/13 20:08*	*5*
Phenol-d5	*71*		*38 - 149*	*09/22/13 18:06*	*09/29/13 20:08*	*5*
Nitrobenzene-d5	*68*		*38 - 141*	*09/22/13 18:06*	*09/29/13 20:08*	*5*
2-Fluorobiphenyl	*58*		*42 - 140*	*09/22/13 18:06*	*09/29/13 20:08*	*5*
2,4,6-Tribromophenol	*63*		*28 - 143*	*09/22/13 18:06*	*09/29/13 20:08*	*5*
Terphenyl-d14	*71*		*42 - 151*	*09/22/13 18:06*	*09/29/13 20:08*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1
PCB-1221	ND		0.012		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1
PCB-1232	ND		0.012		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1
PCB-1242	ND		0.011		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1
PCB-1248	ND		0.011		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1
PCB-1254	ND		0.011		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1
PCB-1260	**0.012**		0.011		mg/Kg	☼	09/23/13 14:09	09/26/13 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*45 - 135*	*09/23/13 14:09*	*09/26/13 19:35*	*1*
DCB Decachlorobiphenyl	*91*		*50 - 140*	*09/23/13 14:09*	*09/26/13 19:35*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		09/27/13 12:19	09/30/13 10:33	1
Barium	**0.80**		0.010		mg/L		09/27/13 12:19	09/30/13 10:33	1
Cadmium	ND		0.010		mg/L		09/27/13 12:19	09/30/13 10:33	1
Chromium	ND		0.025		mg/L		09/27/13 12:19	09/30/13 10:33	1
Lead	ND		0.030		mg/L		09/27/13 12:19	09/30/13 10:33	1
Selenium	ND		0.10		mg/L		09/27/13 12:19	09/30/13 10:33	1
Silver	ND		0.050		mg/L		09/27/13 12:19	09/30/13 10:33	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Client Sample ID: RLT-SP1-091813
Date Collected: 09/18/13 09:06
Date Received: 09/19/13 09:30

Lab Sample ID: 580-40372-1
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		09/27/13 12:25	09/27/13 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/24/13 16:08	1
Percent Moisture	9.3		0.10		%			09/24/13 16:08	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Client Sample ID: RLT-SP2-091813
Date Collected: 09/18/13 09:20
Date Received: 09/19/13 09:30

Lab Sample ID: 580-40372-2
Matrix: Solid
Percent Solids: 91.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,1,1-Trichloroethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,1-Dichloroethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,1-Dichloroethene	ND	H	21		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,1-Dichloropropene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2,3-Trichlorobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2,3-Trichloropropane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2,4-Trichlorobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2,4-Trimethylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2-Dibromo-3-Chloropropane	ND	H	210		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2-Dichlorobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2-Dichloroethane	ND	H	17		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,3,5-Trimethylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,3-Dichlorobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,3-Dichloropropane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
1,4-Dichlorobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
2,2-Dichloropropane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
2-Chlorotoluene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
4-Chlorotoluene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
4-Isopropyltoluene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Acetone	ND	H	420		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Benzene	ND	H	17		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Bromobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Bromoform	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Bromomethane	ND	H	150		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Carbon tetrachloride	ND	H	21		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Chlorobenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Chlorobromomethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Chlorodibromomethane	ND	H	21		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Chloroethane	ND	H	420		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Chloroform	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Chloromethane	ND	H	420		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
cis-1,2-Dichloroethene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
cis-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Dibromomethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Dichlorobromomethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Dichlorodifluoromethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Ethylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Ethylene Dibromide	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Hexachlorobutadiene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Isopropylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Methyl tert-butyl ether	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Methylene Chloride	ND	H	17		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
m-Xylene & p-Xylene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Naphthalene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
n-Butylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Client Sample ID: RLT-SP2-091813
Date Collected: 09/18/13 09:20
Date Received: 09/19/13 09:30

Lab Sample ID: 580-40372-2
Matrix: Solid
Percent Solids: 91.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
o-Xylene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
sec-Butylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Styrene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
tert-Butylbenzene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Tetrachloroethene	ND	H	21		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Toluene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
trans-1,2-Dichloroethene	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
trans-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Trichloroethene	ND	H	17		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Trichlorofluoromethane	ND	H	42		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1
Vinyl chloride	ND	H	8.5		ug/Kg	☼	09/24/13 09:33	09/24/13 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 120*	*09/24/13 09:33*	*09/24/13 13:54*	*1*
Ethylbenzene-d10	*86*		*70 - 120*	*09/24/13 09:33*	*09/24/13 13:54*	*1*
Fluorobenzene (Surr)	*94*		*80 - 120*	*09/24/13 09:33*	*09/24/13 13:54*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*	*09/24/13 09:33*	*09/24/13 13:54*	*1*
Trifluorotoluene (Surr)	*93*		*65 - 140*	*09/24/13 09:33*	*09/24/13 13:54*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**91**		0.10		%			09/24/13 16:08	1
Percent Moisture	**8.7**		0.10		%			09/24/13 16:08	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-145658/1-A
Matrix: Solid
Analysis Batch: 145713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,1,1-Trichloroethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,1,2-Trichloroethane	ND		12		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,1-Dichloroethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,1-Dichloroethene	ND		20		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,1-Dichloropropene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2,3-Trichloropropane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2-Dichlorobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2-Dichloroethane	ND		16		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,2-Dichloropropane	ND		12		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,3-Dichlorobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,3-Dichloropropane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
1,4-Dichlorobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
2,2-Dichloropropane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
2-Chlorotoluene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
4-Chlorotoluene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
4-Isopropyltoluene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Acetone	ND		400		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Benzene	ND		16		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Bromobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Bromoform	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Bromomethane	ND		140		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Carbon tetrachloride	ND		20		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Chlorobenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Chlorobromomethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Chlorodibromomethane	ND		20		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Chloroethane	ND		400		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Chloroform	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Chloromethane	ND		400		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
cis-1,2-Dichloroethene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
cis-1,3-Dichloropropene	ND		16		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Dibromomethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Dichlorobromomethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Dichlorodifluoromethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Ethylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Ethylene Dibromide	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Hexachlorobutadiene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Isopropylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Methyl tert-butyl ether	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Methylene Chloride	ND		16		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
m-Xylene & p-Xylene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Naphthalene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-145658/1-A
Matrix: Solid
Analysis Batch: 145713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145658

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
N-Propylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
o-Xylene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
sec-Butylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Styrene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
tert-Butylbenzene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Tetrachloroethene	ND		20		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Toluene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
trans-1,2-Dichloroethene	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
trans-1,3-Dichloropropene	ND		16		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Trichloroethene	ND		16		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Trichlorofluoromethane	ND		40		ug/Kg		09/24/13 09:33	09/24/13 09:55	1
Vinyl chloride	ND		8.0		ug/Kg		09/24/13 09:33	09/24/13 09:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 120*	*09/24/13 09:33*	*09/24/13 09:55*	*1*
Ethylbenzene-d10	*100*		*70 - 120*	*09/24/13 09:33*	*09/24/13 09:55*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*09/24/13 09:33*	*09/24/13 09:55*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*	*09/24/13 09:33*	*09/24/13 09:55*	*1*
Trifluorotoluene (Surr)	*107*		*65 - 140*	*09/24/13 09:33*	*09/24/13 09:55*	*1*

Lab Sample ID: LCS 580-145658/2-A
Matrix: Solid
Analysis Batch: 145713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	736		ug/Kg		92	72 - 123
1,1,1-Trichloroethane	800	810		ug/Kg		101	63 - 135
1,1,2,2-Tetrachloroethane	800	835		ug/Kg		104	73 - 125
1,1,2-Trichloroethane	800	819		ug/Kg		102	77 - 124
1,1-Dichloroethane	800	837		ug/Kg		105	70 - 128
1,1-Dichloroethene	800	791		ug/Kg		99	70 - 133
1,1-Dichloropropene	800	888		ug/Kg		111	77 - 123
1,2,3-Trichlorobenzene	800	833		ug/Kg		104	61 - 130
1,2,3-Trichloropropane	800	821		ug/Kg		103	77 - 123
1,2,4-Trichlorobenzene	800	840		ug/Kg		105	61 - 130
1,2,4-Trimethylbenzene	800	832		ug/Kg		104	79 - 124
1,2-Dibromo-3-Chloropropane	800	736		ug/Kg		92	53 - 132
1,2-Dichlorobenzene	800	807		ug/Kg		101	79 - 117
1,2-Dichloroethane	800	832		ug/Kg		104	71 - 128
1,2-Dichloropropane	800	1060		ug/Kg		132	76 - 161
1,3,5-Trimethylbenzene	800	816		ug/Kg		102	80 - 125
1,3-Dichlorobenzene	800	802		ug/Kg		100	79 - 119
1,3-Dichloropropane	800	797		ug/Kg		100	77 - 123
1,4-Dichlorobenzene	800	768		ug/Kg		96	79 - 117
2,2-Dichloropropane	800	919		ug/Kg		115	56 - 144
2-Chlorotoluene	800	788		ug/Kg		99	79 - 122
4-Chlorotoluene	800	784		ug/Kg		98	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-145658/2-A
Matrix: Solid
Analysis Batch: 145713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	844		ug/Kg		106	78 - 126
Acetone	3200	3550		ug/Kg		111	20 - 160
Benzene	800	816		ug/Kg		102	70 - 128
Bromobenzene	800	775		ug/Kg		97	80 - 120
Bromoform	800	716		ug/Kg		89	50 - 124
Bromomethane	800	807		ug/Kg		101	57 - 148
Carbon tetrachloride	800	896		ug/Kg		112	59 - 145
Chlorobenzene	800	783		ug/Kg		98	75 - 120
Chlorobromomethane	800	854		ug/Kg		107	78 - 123
Chlorodibromomethane	800	780		ug/Kg		98	69 - 129
Chloroethane	800	885		ug/Kg		111	48 - 167
Chloroform	800	840		ug/Kg		105	78 - 125
Chloromethane	800	735		ug/Kg		92	55 - 136
cis-1,2-Dichloroethene	800	852		ug/Kg		107	70 - 130
cis-1,3-Dichloropropene	800	810		ug/Kg		101	69 - 129
Dibromomethane	800	820		ug/Kg		103	78 - 126
Dichlorobromomethane	800	751		ug/Kg		94	58 - 133
Dichlorodifluoromethane	800	742		ug/Kg		93	38 - 150
Ethylbenzene	800	807		ug/Kg		101	78 - 126
Ethylene Dibromide	800	832		ug/Kg		104	69 - 126
Hexachlorobutadiene	800	862		ug/Kg		108	68 - 134
Isopropylbenzene	800	817		ug/Kg		102	79 - 127
Methyl tert-butyl ether	800	807		ug/Kg		101	65 - 125
Methylene Chloride	800	821		ug/Kg		103	57 - 146
m-Xylene & p-Xylene	800	822		ug/Kg		103	78 - 126
Naphthalene	800	846		ug/Kg		106	14 - 170
n-Butylbenzene	800	825		ug/Kg		103	78 - 128
N-Propylbenzene	800	816		ug/Kg		102	81 - 127
o-Xylene	800	797		ug/Kg		100	77 - 127
sec-Butylbenzene	800	838		ug/Kg		105	78 - 128
Styrene	800	835		ug/Kg		104	79 - 127
tert-Butylbenzene	800	828		ug/Kg		104	71 - 136
Tetrachloroethene	800	813		ug/Kg		102	56 - 150
Toluene	800	802		ug/Kg		100	75 - 126
trans-1,2-Dichloroethene	800	835		ug/Kg		104	76 - 131
trans-1,3-Dichloropropene	800	797		ug/Kg		100	72 - 129
Trichloroethene	800	827		ug/Kg		103	83 - 124
Trichlorofluoromethane	800	713		ug/Kg		89	47 - 165
Vinyl chloride	800	774		ug/Kg		97	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 120*
Ethylbenzene-d10	*94*		*70 - 120*
Fluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Trifluorotoluene (Surr)	*104*		*65 - 140*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

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

Lab Sample ID: MB 580-145548/1-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2-Chlorophenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
1,3-Dichlorobenzene	ND		50		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
1,4-Dichlorobenzene	ND		50		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzyl alcohol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
1,2-Dichlorobenzene	ND		55		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2-Methylphenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
3 & 4 Methylphenol	ND		200		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Hexachloroethane	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Nitrobenzene	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Isophorone	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2-Nitrophenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,4-Dimethylphenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzoic acid	ND		2500		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,4-Dichlorophenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Naphthalene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4-Chloroaniline	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Hexachlorobutadiene	ND		50		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4-Chloro-3-methylphenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2-Methylnaphthalene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Hexachlorocyclopentadiene	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,4,6-Trichlorophenol	ND		150		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,4,5-Trichlorophenol	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2-Chloronaphthalene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2-Nitroaniline	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Dimethyl phthalate	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Acenaphthylene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,6-Dinitrotoluene	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
3-Nitroaniline	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Acenaphthene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,4-Dinitrophenol	ND		1000		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4-Nitrophenol	ND		1000		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Dibenzofuran	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
2,4-Dinitrotoluene	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Diethyl phthalate	ND		200		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Fluorene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4-Nitroaniline	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
N-Nitrosodiphenylamine	ND		50		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Hexachlorobenzene	ND		50		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Pentachlorophenol	ND		200		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Phenanthrene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1

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

Lab Sample ID: MB 580-145548/1-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Di-n-butyl phthalate	ND		500		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Fluoranthene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Pyrene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Butyl benzyl phthalate	ND		200		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzo[a]anthracene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Chrysene	ND		25		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Di-n-octyl phthalate	ND		500		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzo[a]pyrene	ND		30		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Dibenz(a,h)anthracene	ND		40		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzo[g,h,i]perylene	ND		25		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Carbazole	ND		100		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
1-Methylnaphthalene	ND		30		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzo[b]fluoranthene	ND		20		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
Benzo[k]fluoranthene	ND		25		ug/Kg		09/22/13 18:06	09/29/13 01:26	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg		09/22/13 18:06	09/29/13 01:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*90*		*36 - 145*	*09/22/13 18:06*	*09/29/13 01:26*	*1*
Phenol-d5	*69*		*38 - 149*	*09/22/13 18:06*	*09/29/13 01:26*	*1*
Nitrobenzene-d5	*66*		*38 - 141*	*09/22/13 18:06*	*09/29/13 01:26*	*1*
2-Fluorobiphenyl	*77*		*42 - 140*	*09/22/13 18:06*	*09/29/13 01:26*	*1*
2,4,6-Tribromophenol	*67*		*28 - 143*	*09/22/13 18:06*	*09/29/13 01:26*	*1*
Terphenyl-d14	*85*		*42 - 151*	*09/22/13 18:06*	*09/29/13 01:26*	*1*

Lab Sample ID: LCS 580-145548/2-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1010		ug/Kg		101	66 - 126
Bis(2-chloroethyl)ether	998	593		ug/Kg		59	57 - 122
2-Chlorophenol	1000	1080		ug/Kg		108	65 - 125
1,3-Dichlorobenzene	1000	807		ug/Kg		81	64 - 124
1,4-Dichlorobenzene	1010	818		ug/Kg		81	62 - 132
Benzyl alcohol	997	1010		ug/Kg		101	42 - 147
1,2-Dichlorobenzene	1010	868		ug/Kg		86	68 - 118
2-Methylphenol	997	913		ug/Kg		92	56 - 121
3 & 4 Methylphenol	1000	848		ug/Kg		85	61 - 126
N-Nitrosodi-n-propylamine	1000	930		ug/Kg		93	52 - 127
Hexachloroethane	1010	813		ug/Kg		80	56 - 131
Nitrobenzene	1020	970		ug/Kg		96	59 - 134
Isophorone	988	1120		ug/Kg		113	53 - 118
2-Nitrophenol	1010	1070		ug/Kg		106	58 - 128
2,4-Dimethylphenol	1010	1320		ug/Kg		131	58 - 133

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

Lab Sample ID: LCS 580-145548/2-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzoic acid	5090	5360		ug/Kg		105	10 - 130
Bis(2-chloroethoxy)methane	998	799		ug/Kg		80	63 - 128
2,4-Dichlorophenol	1020	1090		ug/Kg		107	59 - 124
1,2,4-Trichlorobenzene	1000	864		ug/Kg		86	63 - 128
Naphthalene	1010	876		ug/Kg		87	64 - 129
4-Chloroaniline	983	465		ug/Kg		47	20 - 181
Hexachlorobutadiene	1000	816		ug/Kg		81	59 - 134
4-Chloro-3-methylphenol	1010	1030		ug/Kg		102	58 - 128
2-Methylnaphthalene	991	869		ug/Kg		88	65 - 125
Hexachlorocyclopentadiene	1000	686		ug/Kg		69	30 - 132
2,4,6-Trichlorophenol	1010	1070		ug/Kg		106	66 - 131
2,4,5-Trichlorophenol	1010	871		ug/Kg		86	64 - 124
2-Chloronaphthalene	1000	876		ug/Kg		88	69 - 129
2-Nitroaniline	983	900		ug/Kg		92	58 - 133
Dimethyl phthalate	1000	1000		ug/Kg		100	65 - 125
Acenaphthylene	1000	997		ug/Kg		100	69 - 129
2,6-Dinitrotoluene	1000	969		ug/Kg		97	65 - 125
3-Nitroaniline	987	692	*	ug/Kg		70	80 - 165
Acenaphthene	1000	940		ug/Kg		94	65 - 130
2,4-Dinitrophenol	5060	3360		ug/Kg		66	53 - 168
4-Nitrophenol	5030	4790		ug/Kg		95	47 - 172
Dibenzofuran	1010	926		ug/Kg		92	70 - 125
2,4-Dinitrotoluene	1000	1130		ug/Kg		113	57 - 122
Diethyl phthalate	1000	928		ug/Kg		93	64 - 129
4-Chlorophenyl phenyl ether	992	831		ug/Kg		84	65 - 130
Fluorene	1010	924		ug/Kg		92	68 - 128
4-Nitroaniline	991	850		ug/Kg		86	70 - 150
4,6-Dinitro-2-methylphenol	5060	4840		ug/Kg		96	38 - 143
N-Nitrosodiphenylamine	1000	1140		ug/Kg		114	88 - 153
4-Bromophenyl phenyl ether	1000	885		ug/Kg		89	64 - 134
Hexachlorobenzene	1000	939		ug/Kg		94	61 - 136
Pentachlorophenol	1000	921		ug/Kg		92	29 - 124
Phenanthrene	1000	893		ug/Kg		89	65 - 125
Anthracene	1010	948		ug/Kg		94	73 - 123
Di-n-butyl phthalate	1000	1080		ug/Kg		108	69 - 124
Fluoranthene	1000	985		ug/Kg		98	61 - 121
Pyrene	998	937		ug/Kg		94	54 - 134
Butyl benzyl phthalate	1000	1080		ug/Kg		107	65 - 140
3,3'-Dichlorobenzidine	1980	1330	*	ug/Kg		67	73 - 163
Benzo[a]anthracene	1000	902		ug/Kg		90	64 - 124
Chrysene	992	921		ug/Kg		93	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1040		ug/Kg		104	64 - 144
Di-n-octyl phthalate	1010	1010		ug/Kg		100	58 - 148
Benzo[a]pyrene	1000	947		ug/Kg		95	68 - 128
Indeno[1,2,3-cd]pyrene	998	963		ug/Kg		96	59 - 139
Dibenz(a,h)anthracene	1000	902		ug/Kg		90	57 - 142
Benzo[g,h,i]perylene	1010	987		ug/Kg		98	57 - 142
Carbazole	1010	973		ug/Kg		97	88 - 158

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

Lab Sample ID: LCS 580-145548/2-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	997	912		ug/Kg		91	48 - 148
Benzo[b]fluoranthene	1000	1000		ug/Kg		100	66 - 136
Benzo[k]fluoranthene	1010	1020		ug/Kg		101	63 - 143
bis (2-chloroisopropyl) ether	993	698		ug/Kg		70	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*84*		*36 - 145*
Phenol-d5	*80*		*38 - 149*
Nitrobenzene-d5	*92*		*38 - 141*
2-Fluorobiphenyl	*83*		*42 - 140*
2,4,6-Tribromophenol	*96*		*28 - 143*
Terphenyl-d14	*91*		*42 - 151*

Lab Sample ID: LCSD 580-145548/3-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145548

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1050		ug/Kg		105	66 - 126	4	26
Bis(2-chloroethyl)ether	998	758		ug/Kg		76	57 - 122	24	60
2-Chlorophenol	1000	1210		ug/Kg		120	65 - 125	11	27
1,3-Dichlorobenzene	1000	891		ug/Kg		89	64 - 124	10	60
1,4-Dichlorobenzene	1010	872		ug/Kg		86	62 - 132	6	32
Benzyl alcohol	997	884		ug/Kg		89	42 - 147	13	60
1,2-Dichlorobenzene	1010	926		ug/Kg		92	68 - 118	7	60
2-Methylphenol	997	956		ug/Kg		96	56 - 121	5	25
3 & 4 Methylphenol	1000	783		ug/Kg		78	61 - 126	8	27
N-Nitrosodi-n-propylamine	1000	996		ug/Kg		99	52 - 127	7	28
Hexachloroethane	1010	854		ug/Kg		84	56 - 131	5	60
Nitrobenzene	1020	909		ug/Kg		90	59 - 134	7	60
Isophorone	988	1130		ug/Kg		114	53 - 118	1	60
2-Nitrophenol	1010	1080		ug/Kg		107	58 - 128	0	60
2,4-Dimethylphenol	1010	1150		ug/Kg		114	58 - 133	14	60
Benzoic acid	5090	5120		ug/Kg		101	10 - 130	5	60
Bis(2-chloroethoxy)methane	998	808		ug/Kg		81	63 - 128	1	60
2,4-Dichlorophenol	1020	1090		ug/Kg		107	59 - 124	0	60
1,2,4-Trichlorobenzene	1000	888		ug/Kg		89	63 - 128	3	28
Naphthalene	1010	894		ug/Kg		89	64 - 129	2	26
4-Chloroaniline	983	328		ug/Kg		33	20 - 181	34	60
Hexachlorobutadiene	1000	860		ug/Kg		86	59 - 134	5	60
4-Chloro-3-methylphenol	1010	1130		ug/Kg		112	58 - 128	10	27
2-Methylnaphthalene	991	839		ug/Kg		85	65 - 125	4	27
Hexachlorocyclopentadiene	1000	655		ug/Kg		66	30 - 132	5	60
2,4,6-Trichlorophenol	1010	1130		ug/Kg		112	66 - 131	5	60
2,4,5-Trichlorophenol	1010	880		ug/Kg		87	64 - 124	1	60
2-Chloronaphthalene	1000	921		ug/Kg		92	69 - 129	5	25
2-Nitroaniline	983	867		ug/Kg		88	58 - 133	4	60
Dimethyl phthalate	1000	1010		ug/Kg		101	65 - 125	1	60

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

Lab Sample ID: LCSD 580-145548/3-A
Matrix: Solid
Analysis Batch: 146063

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145548

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene			1000	1030		ug/Kg		103	69 - 129	3	28
2,6-Dinitrotoluene			1000	1010		ug/Kg		101	65 - 125	5	60
3-Nitroaniline			987	710	*	ug/Kg		72	80 - 165	3	60
Acenaphthene			1000	940		ug/Kg		94	65 - 130	0	27
2,4-Dinitrophenol			5060	3330		ug/Kg		66	53 - 168	1	60
4-Nitrophenol			5030	4760		ug/Kg		95	47 - 172	1	33
Dibenzofuran			1010	910		ug/Kg		90	70 - 125	2	60
2,4-Dinitrotoluene			1000	1060		ug/Kg		106	57 - 122	6	31
Diethyl phthalate			1000	946		ug/Kg		94	64 - 129	2	26
4-Chlorophenyl phenyl ether			992	858		ug/Kg		86	65 - 130	3	60
Fluorene			1010	931		ug/Kg		92	68 - 128	1	31
4-Nitroaniline			991	808		ug/Kg		82	70 - 150	5	60
4,6-Dinitro-2-methylphenol			5060	5020		ug/Kg		99	38 - 143	4	60
N-Nitrosodiphenylamine			1000	1170		ug/Kg		117	88 - 153	2	60
4-Bromophenyl phenyl ether			1000	851		ug/Kg		85	64 - 134	4	60
Hexachlorobenzene			1000	968		ug/Kg		97	61 - 136	3	60
Pentachlorophenol			1000	1040		ug/Kg		104	29 - 124	12	68
Phenanthrene			1000	943		ug/Kg		94	65 - 125	6	28
Anthracene			1010	948		ug/Kg		94	73 - 123	0	27
Di-n-butyl phthalate			1000	1080		ug/Kg		108	69 - 124	0	60
Fluoranthene			1000	987		ug/Kg		99	61 - 121	0	36
Pyrene			998	972		ug/Kg		97	54 - 134	4	31
Butyl benzyl phthalate			1000	1070		ug/Kg		106	65 - 140	1	60
3,3'-Dichlorobenzidine			1980	1370	*	ug/Kg		69	73 - 163	3	60
Benzo[a]anthracene			1000	912		ug/Kg		91	64 - 124	1	27
Chrysene			992	936		ug/Kg		94	71 - 126	2	26
Bis(2-ethylhexyl) phthalate			1000	1040		ug/Kg		103	64 - 144	0	60
Di-n-octyl phthalate			1010	953		ug/Kg		95	58 - 148	5	31
Benzo[a]pyrene			1000	890		ug/Kg		89	68 - 128	6	30
Indeno[1,2,3-cd]pyrene			998	892		ug/Kg		89	59 - 139	8	29
Dibenz(a,h)anthracene			1000	813		ug/Kg		81	57 - 142	10	30
Benzo[g,h,i]perylene			1010	896		ug/Kg		89	57 - 142	10	28
Carbazole			1010	975		ug/Kg		97	88 - 158	0	60
1-Methylnaphthalene			997	899		ug/Kg		90	48 - 148	1	30
Benzo[b]fluoranthene			1000	957		ug/Kg		95	66 - 136	4	31
Benzo[k]fluoranthene			1010	966		ug/Kg		96	63 - 143	6	31
bis (2-chloroisopropyl) ether			993	737		ug/Kg		74	44 - 140	5	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*83*		*36 - 145*
Phenol-d5	*80*		*38 - 149*
Nitrobenzene-d5	*94*		*38 - 141*
2-Fluorobiphenyl	*85*		*42 - 140*
2,4,6-Tribromophenol	*93*		*28 - 143*
Terphenyl-d14	*88*		*42 - 151*

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

Lab Sample ID: MB 580-145585/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 145848 — **Prep Batch: 145585**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1221	ND		0.011		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1232	ND		0.011		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1242	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1248	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1254	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1
PCB-1260	ND		0.010		mg/Kg		09/23/13 14:09	09/26/13 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*45 - 135*	*09/23/13 14:09*	*09/26/13 18:50*	*1*
DCB Decachlorobiphenyl	*102*		*50 - 140*	*09/23/13 14:09*	*09/26/13 18:50*	*1*

Lab Sample ID: LCS 580-145585/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 145848 — **Prep Batch: 145585**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.0932		mg/Kg		93	40 - 140		
PCB-1260			0.100	0.103		mg/Kg		103	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*45 - 135*
DCB Decachlorobiphenyl	*107*		*50 - 140*

Lab Sample ID: LCSD 580-145585/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 145848 — **Prep Batch: 145585**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.105		mg/Kg		105	40 - 140	12	20
PCB-1260			0.100	0.112		mg/Kg		112	60 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Lab Sample ID: 580-40372-1 MS — **Client Sample ID: RLT-SP1-091813**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 145848 — **Prep Batch: 145585**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		0.100	0.106		mg/Kg	☼	105	40 - 140		
PCB-1260	ND		0.100	0.124		mg/Kg	☼	114	60 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*45 - 135*
DCB Decachlorobiphenyl	*86*		*50 - 140*

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

Lab Sample ID: 580-40372-1 MSD
Matrix: Solid
Analysis Batch: 145848

Client Sample ID: RLT-SP1-091813
Prep Type: Total/NA
Prep Batch: 145585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.108	0.0914		mg/Kg	☼	84	40 - 140	14	20
PCB-1260	ND		0.108	0.110		mg/Kg	☼	92	60 - 130	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*45 - 135*
DCB Decachlorobiphenyl	*81*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-145876/1-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 145998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		09/27/13 12:19	09/30/13 10:19	1
Barium	ND		0.010		mg/L		09/27/13 12:19	09/30/13 10:19	1
Cadmium	ND		0.010		mg/L		09/27/13 12:19	09/30/13 10:19	1
Chromium	ND		0.025		mg/L		09/27/13 12:19	09/30/13 10:19	1
Lead	ND		0.030		mg/L		09/27/13 12:19	09/30/13 10:19	1
Selenium	ND		0.10		mg/L		09/27/13 12:19	09/30/13 10:19	1
Silver	ND		0.050		mg/L		09/27/13 12:19	09/30/13 10:19	1

Lab Sample ID: LCS 580-145876/2-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 145998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	4.19		mg/L		105	80 - 120
Barium	4.00	3.99		mg/L		100	80 - 120
Cadmium	0.100	0.103		mg/L		103	80 - 120
Chromium	0.400	0.401		mg/L		100	80 - 120
Lead	1.00	0.980		mg/L		98	80 - 120
Selenium	4.00	4.26		mg/L		107	80 - 120
Silver	0.600	0.573		mg/L		95	80 - 120

Lab Sample ID: LCSD 580-145876/3-B
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP
Prep Batch: 145998

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.28		mg/L		107	80 - 120	2	20
Barium	4.00	4.01		mg/L		100	80 - 120	1	20
Cadmium	0.100	0.104		mg/L		104	80 - 120	1	20
Chromium	0.400	0.408		mg/L		102	80 - 120	2	20
Lead	1.00	1.01		mg/L		101	80 - 120	3	20
Selenium	4.00	4.34		mg/L		109	80 - 120	2	20
Silver	0.600	0.591		mg/L		99	80 - 120	3	20

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

Lab Sample ID: 580-40372-1 MS
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: RLT-SP1-091813
Prep Type: TCLP
Prep Batch: 145998

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		4.00	4.48		mg/L		112	50 - 150
Barium	0.80		4.00	4.95		mg/L		104	50 - 150
Cadmium	ND		0.100	0.105		mg/L		105	50 - 150
Chromium	ND		0.400	0.414		mg/L		104	50 - 150
Lead	ND		1.00	0.990		mg/L		99	50 - 150
Selenium	ND		4.00	4.65		mg/L		116	50 - 150
Silver	ND		0.600	0.576		mg/L		96	50 - 150

Lab Sample ID: 580-40372-1 MSD
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: RLT-SP1-091813
Prep Type: TCLP
Prep Batch: 145998

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		4.00	4.49		mg/L		112	50 - 150	0	20
Barium	0.80		4.00	4.92		mg/L		103	50 - 150	1	20
Cadmium	ND		0.100	0.105		mg/L		105	50 - 150	0	20
Chromium	ND		0.400	0.416		mg/L		104	50 - 150	0	20
Lead	ND		1.00	1.00		mg/L		100	50 - 150	1	20
Selenium	ND		4.00	4.65		mg/L		116	50 - 150	0	20
Silver	ND		0.600	0.592		mg/L		99	50 - 150	3	20

Lab Sample ID: 580-40372-1 DU
Matrix: Solid
Analysis Batch: 146143

Client Sample ID: RLT-SP1-091813
Prep Type: TCLP
Prep Batch: 145998

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND		ND		mg/L		NC	20
Barium	0.80		0.805		mg/L		0.4	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-145876/1-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 145999

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		09/27/13 12:25	09/27/13 14:33	1

Lab Sample ID: LCS 580-145876/2-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 145999

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0200	0.0171		mg/L		85	80 - 120

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

Lab Sample ID: LCSD 580-145876/3-C
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP
Prep Batch: 145999

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.0200	0.0168		mg/L		84	80 - 120	2	20

Lab Sample ID: 580-40372-1 MS
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: RLT-SP1-091813
Prep Type: TCLP
Prep Batch: 145999

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.0200	0.0173		mg/L		84	80 - 120		

Lab Sample ID: 580-40372-1 MSD
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: RLT-SP1-091813
Prep Type: TCLP
Prep Batch: 145999

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0200	0.0173		mg/L		84	80 - 120	0	20

Lab Sample ID: 580-40372-1 DU
Matrix: Solid
Analysis Batch: 146027

Client Sample ID: RLT-SP1-091813
Prep Type: TCLP
Prep Batch: 145999

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/L		NC	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40372-1

Client Sample ID: RLT-SP1-091813

Lab Sample ID: 580-40372-1

Date Collected: 09/18/13 09:06
Matrix: Solid
Date Received: 09/19/13 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	3550B			145548	09/22/13 18:06	EKK	TAL SEA
Total/NA	Analysis	8270C		5	146096	09/29/13 20:08	CGM	TAL SEA
Total/NA	Analysis	8082		1	145848	09/26/13 19:35	SGH	TAL SEA
Total/NA	Prep	3550B			145585	09/23/13 14:09	WW1	TAL SEA
TCLP	Leach	1311			145876	09/26/13 09:54	RBD	TAL SEA
TCLP	Prep	7470A			145999	09/27/13 12:25	PAB	TAL SEA
TCLP	Analysis	7470A		1	146027	09/27/13 14:40	PAB	TAL SEA
TCLP	Leach	1311			145876	09/26/13 09:54	RBD	TAL SEA
TCLP	Prep	3010A			145998	09/27/13 12:19	PAB	TAL SEA
TCLP	Analysis	6010B		1	146143	09/30/13 10:33	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145724	09/24/13 16:08	JJP	TAL SEA

Client Sample ID: RLT-SP2-091813

Lab Sample ID: 580-40372-2

Date Collected: 09/18/13 09:20
Matrix: Solid
Date Received: 09/19/13 09:30
Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			145658	09/24/13 09:33	MMH	TAL SEA
Total/NA	Analysis	8260B		1	145713	09/24/13 13:54	MMH	TAL SEA
Total/NA	Analysis	D 2216		1	145724	09/24/13 16:08	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

TestAmerica Job ID: 580-40372-1

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: 580-40372-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40372-1	RLT-SP1-091813	Solid	09/18/13 09:06	09/19/13 09:30
580-40372-2	RLT-SP2-091813	Solid	09/18/13 09:20	09/19/13 09:30

From: Howard Young [mailto:HowardYoung@KennedyJenks.com]
Sent: Thursday, September 19, 2013 9:28 PM
To: Berry, Vanessa
Cc: Allen, Kristine
Subject: RE: Sample Login Confirmation for 580-40333, Parkwater Remedial Action

Okay here is the COC.
I would like to have these samples analyzed for:
VOCs (the grab sample only) — full full list RCT - SP2 grab
SVOCs (8270 list) — full list 8270 → composite
PCBs — composite
TCLP Metals → composite

Run the TCLP metals on 1 day turnaround and the rest of the analyses on 5 day turnaround.

Thanks!

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: Berry, Vanessa [mailto:Vanessa.Berry@testamericainc.com]
Sent: Thursday, September 19, 2013 7:56 PM
To: Howard Young; Allen, Kristine
Subject: RE: Sample Login Confirmation for 580-40333, Parkwater Remedial Action

I will check to see if these were received today, and let you know what I can find. Thanks!

Sincerely,
Vanessa Berry
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

9/20/2013

BNSF RAILWAY — CHAIN OF CUSTODY

LAB WORK ORDER: 40372

LABORATORY INFORMATION

Laboratory:
Project Manager:
Address:
Phone:
City/State/ZIP:
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 13961110.04
Project State of Origin: WASHINGTON
Project City: SPOKANE
BNSF Project Name: PARKWATER
BNSF Contact: BRUCE SHEPARD
BNSF Work Order No.: TTD101-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Address: 32001 32nd AVES SUITE 100
City/State/ZIP: FEDERAL WAY, WA 98001
Project Number: 13961110.04
Project Manager: HOWARD YOUNG
Email: howardyoung@kennedyjenks.com
Phone: 253-835-6400
Fax: 253-952-3435

TURNAROUND TIME

DL
- [X] 1-day Rush
- [ ] 2-day Rush
- [ ] 3-day Rush
- [ ] 5- to 8-day Rush
- [X] Standard 10-Day
- [ ] Other

DELIVERABLES

- [ ] BNSF Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [X] Other Deliverables? K/J Custom EDD
- [X] EDD Req, Format?

SAMPLE INFORMATION

	Sample identification	Containers	Sample Collection Date	Time	Sampler	Filtered Y/N	Type (Comp/ Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
1	RLT-SP1-091813	2	9/18/13	0906	DR	N	C	S	HOLD PENDING ANALYSIS PER K/J		
2	~~RLT-SP2-091813~~	1	~~9/18/13~~	~~0908~~	DR	N	C	S			
3	RLT-SP2-091813	1	9/18/13	0910	DR	N	G	S			
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

580-40372 Chain of Custody

Cooler/TB Dig/IR cor 1.2 unc 1.2
Cooler Dsc Mod Blue @ Lab
Wet/Packs Packing bubble
w/ice Fedex P.O.

	Date/Time	Received By	Date/Time
Relinquished By:	9/18/13 1105		9/18/13 11:09
Relinquished By: Pat Hamilton	9/18/13 16:00	Received By: Cathy Jamble	9/19/13 9:30
Relinquished By:	Date/Time	Received By:	Date/Time

Comments and Special Analytical Requirements:

Received by Laboratory:	Date/Time	Lab Remarks:	Lab: Custody Intact? ☐ Yes ☐ No	Custody Seal No..	BNSF COC No .

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES — DUPLICATE - CONSULTANT — TAL-1001 (06/08)

10/2/2013

Login Container Summary Report

Temperature readings: Samples unloaded in walk-in on a cart. 7.3°C - @ 9:45 - put away @ 7:48

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40372-1

Login Number: 40372

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.	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").	True	
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: 580-40501-1
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:
10/15/2013 3:30:31 PM

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

Table of Contents

Job ID: 580-40501-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 9/24/2013 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.0º C.

Except:

The Chain-of-Custody (COC) requests method 6020 for RCRA TCLP metals. The samples were logged in for method 6010 RCRA TCLP Metals.

The following samples were received as bulk soil for 8260 analysis: WFE-SP1A-092013 (580-40501-1), WFE-SP2A-092013 (580-40501-2), WFE-SP3A-092013 (580-40501-3), WFE-SP4A-092013 (580-40501-4), WFE-SP5A-092013 (580-40501-5), WFE-SP6A-092013 (580-40501-6). Samples were extracted into methanol by the laboratory.

GC/MS VOA - Method(s) 8260B
The following sample(s) was prepared outside of preparation holding time: (580-40501-6 MS), (580-40501-6 MSD), WFE-SP1A-092013 (580-40501-1), WFE-SP2A-092013 (580-40501-2), WFE-SP3A-092013 (580-40501-3), WFE-SP4A-092013 (580-40501-4), WFE-SP5A-092013 (580-40501-5), WFE-SP6A-092013 (580-40501-6). Samples were received as bulk soil and extracted into methanol by the laboratory more than 48 hours after sampling.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries and RPD for batch 146517 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C
A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCS/LCSD associated with prep batch 146384 had 3 analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

GC Semi VOA
In analytical batch 146122 surrogate recovery for the CCV associated with the following sample(s) was outside the upper control limit, for Tetrachloro-m-xylene: (580-40501-1 MS), (580-40501-1 MSD), (CCV 580-146122/39), (LCS 580-145951/2-A), (LCSD 580-145951/3-A), (MB 580-145951/1-A), WFE-SP1A-092013 (580-40501-1). This sample did not contain any target analytes and the QC was not adversely affected by the high bias; therefore, re-extraction and/or re-analysis was not performed.

In analytical batch 146122 the RPD between the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 145951 recovered outside control limits for the following analytes: PCB-1260. The %R of both the LCS and LCSD are within control limits. The affected samples are: (580-40501-1 MS), (580-40501-1 MSD), (LCS 580-145951/2-A), (LCSD 580-145951/3-A), WFE-SP1A-092013 (580-40501-1), WFE-SP2A-092013 (580-40501-2), WFE-SP3A-092013 (580-40501-3), WFE-SP4A-092013 (580-40501-4), WFE-SP5A-092013 (580-40501-5), WFE-SP6A-092013 (580-40501-6).

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.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
F	MS/MSD Recovery and/or RPD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
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: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP1A-092013
Date Collected: 09/20/13 16:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-1
Matrix: Solid
Percent Solids: 89.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,1,1-Trichloroethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,1-Dichloroethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,1-Dichloropropene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2,3-Trichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2,3-Trichloropropane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2,4-Trichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2,4-Trimethylbenzene	**89**	**H**	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2-Dichloroethane	ND	H	18		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,3,5-Trimethylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,3-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,3-Dichloropropane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
1,4-Dichlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
2,2-Dichloropropane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
2-Chlorotoluene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
4-Chlorotoluene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
4-Isopropyltoluene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Acetone	ND	H	440		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Benzene	ND	H	18		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Bromobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Bromoform	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Bromomethane	ND	H	160		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Chlorobenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Chlorobromomethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Chloroethane	ND	H	440		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Chloroform	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Chloromethane	ND	H	440		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
cis-1,2-Dichloroethene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
cis-1,3-Dichloropropene	ND	H	18		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Dibromomethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Dichlorobromomethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Dichlorodifluoromethane	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Ethylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Ethylene Dibromide	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Hexachlorobutadiene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Isopropylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Methyl tert-butyl ether	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Methylene Chloride	ND	H	18		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
m-Xylene & p-Xylene	**140**	**H**	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Naphthalene	**57**	**H**	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
n-Butylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1

Client Sample ID: WFE-SP1A-092013
Date Collected: 09/20/13 16:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-1
Matrix: Solid
Percent Solids: 89.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
o-Xylene	**97**	**H**	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
sec-Butylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Styrene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
tert-Butylbenzene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Tetrachloroethene	ND	H	22		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Toluene	**120**	**H**	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
trans-1,2-Dichloroethene	ND	H	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
trans-1,3-Dichloropropene	ND	H	18		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Trichloroethene	ND	H	18		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Trichlorofluoromethane	**64**	**H**	44		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1
Vinyl chloride	ND	H	8.9		ug/Kg	☼	09/26/13 15:21	10/03/13 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 120*	*09/26/13 15:21*	*10/03/13 19:37*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*	*09/26/13 15:21*	*10/03/13 19:37*	*1*
Trifluorotoluene (Surr)	*88*		*65 - 140*	*09/26/13 15:21*	*10/03/13 19:37*	*1*
Dibromofluoromethane (Surr)	*84*		*75 - 125*	*09/26/13 15:21*	*10/03/13 19:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*71 - 136*	*09/26/13 15:21*	*10/03/13 19:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2-Chlorophenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
1,3-Dichlorobenzene	ND		51		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
1,4-Dichlorobenzene	ND		51		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzyl alcohol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
1,2-Dichlorobenzene	ND		56		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2-Methylphenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
3 & 4 Methylphenol	ND		200		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Hexachloroethane	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Nitrobenzene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Isophorone	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2-Nitrophenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,4-Dimethylphenol	ND	*	100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzoic acid	ND		2500		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,4-Dichlorophenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
1,2,4-Trichlorobenzene	ND		51		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Naphthalene	**58**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4-Chloroaniline	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Hexachlorobutadiene	ND		51		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4-Chloro-3-methylphenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2-Methylnaphthalene	**110**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Hexachlorocyclopentadiene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,4,6-Trichlorophenol	ND		150		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,4,5-Trichlorophenol	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2-Chloronaphthalene	ND		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP1A-092013
Date Collected: 09/20/13 16:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-1
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Dimethyl phthalate	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Acenaphthylene	ND		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,6-Dinitrotoluene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
3-Nitroaniline	ND	*	100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Acenaphthene	ND		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,4-Dinitrophenol	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4-Nitrophenol	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Dibenzofuran	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
2,4-Dinitrotoluene	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Diethyl phthalate	ND		200		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Fluorene	ND		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4-Nitroaniline	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
N-Nitrosodiphenylamine	ND		51		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Hexachlorobenzene	ND		51		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Pentachlorophenol	ND		200		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Phenanthrene	**73**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Anthracene	ND		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Di-n-butyl phthalate	ND		510		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Fluoranthene	**83**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Pyrene	**77**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Butyl benzyl phthalate	ND		200		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
3,3'-Dichlorobenzidine	ND	*	200		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzo[a]anthracene	**44**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Chrysene	**84**		25		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Bis(2-ethylhexyl) phthalate	ND		610		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Di-n-octyl phthalate	ND		510		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzo[a]pyrene	**38**		31		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Indeno[1,2,3-cd]pyrene	ND		41		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Dibenz(a,h)anthracene	ND		41		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzo[g,h,i]perylene	**32**		25		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Carbazole	ND		100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
1-Methylnaphthalene	**84**		31		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzo[b]fluoranthene	**120**		20		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
Benzo[k]fluoranthene	**40**		25		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg	☼	10/02/13 13:15	10/03/13 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*87*		*36 - 145*	*10/02/13 13:15*	*10/03/13 16:06*	*1*
Phenol-d5	*86*		*38 - 149*	*10/02/13 13:15*	*10/03/13 16:06*	*1*
Nitrobenzene-d5	*86*		*38 - 141*	*10/02/13 13:15*	*10/03/13 16:06*	*1*
2-Fluorobiphenyl	*77*		*42 - 140*	*10/02/13 13:15*	*10/03/13 16:06*	*1*
2,4,6-Tribromophenol	*71*		*28 - 143*	*10/02/13 13:15*	*10/03/13 16:06*	*1*
Terphenyl-d14	*90*		*42 - 151*	*10/02/13 13:15*	*10/03/13 16:06*	*1*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP1A-092013
Date Collected: 09/20/13 16:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-1
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1
PCB-1221	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1
PCB-1232	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1
PCB-1242	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1
PCB-1248	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1
PCB-1254	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1
PCB-1260	ND	*	0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*	^	*45 - 135*	*09/27/13 05:44*	*09/30/13 19:20*	*1*
DCB Decachlorobiphenyl	*105*		*50 - 140*	*09/27/13 05:44*	*09/30/13 19:20*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:33	10/14/13 09:08	1
Barium	**0.81**		0.010		mg/L		10/13/13 12:33	10/14/13 09:08	1
Cadmium	ND		0.010		mg/L		10/13/13 12:33	10/14/13 09:08	1
Chromium	ND		0.025		mg/L		10/13/13 12:33	10/14/13 09:08	1
Lead	**1.2**		0.030		mg/L		10/13/13 12:33	10/14/13 09:08	1
Selenium	ND		0.10		mg/L		10/13/13 12:33	10/14/13 09:08	1
Silver	ND		0.050		mg/L		10/13/13 12:33	10/14/13 09:08	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**89**		0.10		%			09/27/13 11:47	1
Percent Moisture	**11**		0.10		%			09/27/13 11:47	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP2A-092013
Date Collected: 09/20/13 16:40
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-2
Matrix: Solid
Percent Solids: 88.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,1,1-Trichloroethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,1-Dichloroethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,1-Dichloropropene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2,3-Trichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2,3-Trichloropropane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2,4-Trichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2,4-Trimethylbenzene	**88**	**H**	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2-Dichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2-Dichloroethane	ND	H	17		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,3,5-Trimethylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,3-Dichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,3-Dichloropropane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
1,4-Dichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
2,2-Dichloropropane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
2-Chlorotoluene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
4-Chlorotoluene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
4-Isopropyltoluene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Acetone	ND	H	430		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Benzene	**21**	**H**	17		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Bromobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Bromoform	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Bromomethane	ND	H	150		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Chlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Chlorobromomethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Chloroethane	ND	H	430		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Chloroform	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Chloromethane	ND	H	430		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
cis-1,2-Dichloroethene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
cis-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Dibromomethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Dichlorobromomethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Dichlorodifluoromethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Ethylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Ethylene Dibromide	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Hexachlorobutadiene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Isopropylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Methyl tert-butyl ether	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Methylene Chloride	ND	H	17		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
m-Xylene & p-Xylene	**140**	**H**	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Naphthalene	**56**	**H**	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
n-Butylbenzene	**74**	**H**	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP2A-092013
Date Collected: 09/20/13 16:40
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-2
Matrix: Solid
Percent Solids: 88.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
o-Xylene	**87**	**H**	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
sec-Butylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Styrene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
tert-Butylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Tetrachloroethene	ND	H	22		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Toluene	**150**	**H**	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
trans-1,2-Dichloroethene	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
trans-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Trichloroethene	ND	H	17		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Trichlorofluoromethane	ND	H	43		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1
Vinyl chloride	ND	H	8.6		ug/Kg	☼	09/26/13 15:24	10/03/13 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*	*09/26/13 15:24*	*10/03/13 19:58*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*	*09/26/13 15:24*	*10/03/13 19:58*	*1*
Trifluorotoluene (Surr)	*91*		*65 - 140*	*09/26/13 15:24*	*10/03/13 19:58*	*1*
Dibromofluoromethane (Surr)	*81*		*75 - 125*	*09/26/13 15:24*	*10/03/13 19:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 136*	*09/26/13 15:24*	*10/03/13 19:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Bis(2-chloroethyl)ether	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2-Chlorophenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
1,3-Dichlorobenzene	ND		270		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
1,4-Dichlorobenzene	ND		270		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzyl alcohol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
1,2-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2-Methylphenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
3 & 4 Methylphenol	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
N-Nitrosodi-n-propylamine	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Hexachloroethane	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Nitrobenzene	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Isophorone	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2-Nitrophenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,4-Dimethylphenol	ND	*	530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzoic acid	ND		13000		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Bis(2-chloroethoxy)methane	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,4-Dichlorophenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
1,2,4-Trichlorobenzene	ND		270		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Naphthalene	**130**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4-Chloroaniline	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Hexachlorobutadiene	ND		270		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4-Chloro-3-methylphenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2-Methylnaphthalene	**230**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Hexachlorocyclopentadiene	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,4,6-Trichlorophenol	ND		800		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,4,5-Trichlorophenol	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2-Chloronaphthalene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP2A-092013
Date Collected: 09/20/13 16:40
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-2
Matrix: Solid
Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Dimethyl phthalate	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Acenaphthylene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,6-Dinitrotoluene	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
3-Nitroaniline	ND	*	530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Acenaphthene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,4-Dinitrophenol	ND		5300		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4-Nitrophenol	ND		5300		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Dibenzofuran	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
2,4-Dinitrotoluene	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Diethyl phthalate	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4-Chlorophenyl phenyl ether	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Fluorene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4-Nitroaniline	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4,6-Dinitro-2-methylphenol	ND		5300		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
N-Nitrosodiphenylamine	ND		270		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
4-Bromophenyl phenyl ether	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Hexachlorobenzene	ND		270		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Pentachlorophenol	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Phenanthrene	**260**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Anthracene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Di-n-butyl phthalate	ND		2700		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Fluoranthene	**400**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Pyrene	**390**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Butyl benzyl phthalate	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
3,3'-Dichlorobenzidine	ND	*	1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzo[a]anthracene	**240**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Chrysene	**360**		130		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Bis(2-ethylhexyl) phthalate	ND		3200		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Di-n-octyl phthalate	ND		2700		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzo[a]pyrene	**320**		160		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Indeno[1,2,3-cd]pyrene	ND		210		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Dibenz(a,h)anthracene	ND		210		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzo[g,h,i]perylene	**260**		130		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Carbazole	ND		530		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
1-Methylnaphthalene	**180**		160		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzo[b]fluoranthene	**440**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
Benzo[k]fluoranthene	ND		130		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5
bis (2-chloroisopropyl) ether	ND		1300		ug/Kg	☼	10/02/13 13:15	10/03/13 16:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*93*		*36 - 145*	*10/02/13 13:15*	*10/03/13 16:30*	*5*
Phenol-d5	*92*		*38 - 149*	*10/02/13 13:15*	*10/03/13 16:30*	*5*
Nitrobenzene-d5	*93*		*38 - 141*	*10/02/13 13:15*	*10/03/13 16:30*	*5*
2-Fluorobiphenyl	*81*		*42 - 140*	*10/02/13 13:15*	*10/03/13 16:30*	*5*
2,4,6-Tribromophenol	*80*		*28 - 143*	*10/02/13 13:15*	*10/03/13 16:30*	*5*
Terphenyl-d14	*88*		*42 - 151*	*10/02/13 13:15*	*10/03/13 16:30*	*5*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP2A-092013
Date Collected: 09/20/13 16:40
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-2
Matrix: Solid
Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1
PCB-1221	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1
PCB-1232	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1
PCB-1242	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1
PCB-1248	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1
PCB-1254	ND		0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1
PCB-1260	ND	*	0.011		mg/Kg	☼	09/27/13 05:44	09/30/13 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*45 - 135*	*09/27/13 05:44*	*09/30/13 20:39*	*1*
DCB Decachlorobiphenyl	*97*		*50 - 140*	*09/27/13 05:44*	*09/30/13 20:39*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:33	10/14/13 09:11	1
Barium	**0.41**		0.010		mg/L		10/13/13 12:33	10/14/13 09:11	1
Cadmium	**0.020**		0.010		mg/L		10/13/13 12:33	10/14/13 09:11	1
Chromium	ND		0.025		mg/L		10/13/13 12:33	10/14/13 09:11	1
Lead	**1.1**		0.030		mg/L		10/13/13 12:33	10/14/13 09:11	1
Selenium	ND		0.10		mg/L		10/13/13 12:33	10/14/13 09:11	1
Silver	ND		0.050		mg/L		10/13/13 12:33	10/14/13 09:11	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**88**		0.10		%			09/27/13 11:47	1
Percent Moisture	**12**		0.10		%			09/27/13 11:47	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP3A-092013
Date Collected: 09/20/13 16:50
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-3
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,1,1-Trichloroethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,1,2,2-Tetrachloroethane	ND	H	12		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,1,2-Trichloroethane	ND	H	14		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,1-Dichloroethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,1-Dichloroethene	ND	H	24		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,1-Dichloropropene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2,3-Trichlorobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2,3-Trichloropropane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2,4-Trichlorobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2,4-Trimethylbenzene	**81**	**H**	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2-Dibromo-3-Chloropropane	ND	H	240		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2-Dichlorobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2-Dichloroethane	ND	H	19		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,2-Dichloropropane	ND	H	14		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,3,5-Trimethylbenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,3-Dichlorobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,3-Dichloropropane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
1,4-Dichlorobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
2,2-Dichloropropane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
2-Chlorotoluene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
4-Chlorotoluene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
4-Isopropyltoluene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Acetone	ND	H	470		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Benzene	ND	H	19		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Bromobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Bromoform	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Bromomethane	ND	H	160		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Carbon tetrachloride	ND	H	24		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Chlorobenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Chlorobromomethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Chlorodibromomethane	ND	H	24		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Chloroethane	ND	H	470		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Chloroform	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Chloromethane	ND	H	470		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
cis-1,2-Dichloroethene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
cis-1,3-Dichloropropene	ND	H	19		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Dibromomethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Dichlorobromomethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Dichlorodifluoromethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Ethylbenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Ethylene Dibromide	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Hexachlorobutadiene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Isopropylbenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Methyl tert-butyl ether	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Methylene Chloride	ND	H	19		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
m-Xylene & p-Xylene	**150**	**H**	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Naphthalene	**63**	**H**	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
n-Butylbenzene	**54**	**H**	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP3A-092013
Date Collected: 09/20/13 16:50
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-3
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
o-Xylene	**98**	**H**	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
sec-Butylbenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Styrene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
tert-Butylbenzene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Tetrachloroethene	ND	H	24		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Toluene	**150**	**H**	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
trans-1,2-Dichloroethene	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
trans-1,3-Dichloropropene	ND	H	19		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Trichloroethene	ND	H	19		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Trichlorofluoromethane	ND	H	47		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1
Vinyl chloride	ND	H	9.4		ug/Kg	☼	09/26/13 15:27	10/03/13 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*	*09/26/13 15:27*	*10/03/13 20:19*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*	*09/26/13 15:27*	*10/03/13 20:19*	*1*
Trifluorotoluene (Surr)	*88*		*65 - 140*	*09/26/13 15:27*	*10/03/13 20:19*	*1*
Dibromofluoromethane (Surr)	*73*		*70 - 130*	*09/26/13 15:27*	*10/03/13 20:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*71 - 136*	*09/26/13 15:27*	*10/03/13 20:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Bis(2-chloroethyl)ether	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2-Chlorophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
1,3-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
1,4-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzyl alcohol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
1,2-Dichlorobenzene	ND		320		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2-Methylphenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
3 & 4 Methylphenol	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
N-Nitrosodi-n-propylamine	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Hexachloroethane	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Nitrobenzene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Isophorone	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2-Nitrophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,4-Dimethylphenol	ND	*	570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzoic acid	ND		14000		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Bis(2-chloroethoxy)methane	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,4-Dichlorophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
1,2,4-Trichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Naphthalene	**140**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4-Chloroaniline	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Hexachlorobutadiene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4-Chloro-3-methylphenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2-Methylnaphthalene	**220**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Hexachlorocyclopentadiene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,4,6-Trichlorophenol	ND		860		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,4,5-Trichlorophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2-Chloronaphthalene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP3A-092013
Date Collected: 09/20/13 16:50
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-3
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Dimethyl phthalate	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Acenaphthylene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,6-Dinitrotoluene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
3-Nitroaniline	ND	*	570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Acenaphthene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,4-Dinitrophenol	ND		5700		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4-Nitrophenol	ND		5700		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Dibenzofuran	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
2,4-Dinitrotoluene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Diethyl phthalate	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4-Chlorophenyl phenyl ether	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Fluorene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4-Nitroaniline	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4,6-Dinitro-2-methylphenol	ND		5700		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
N-Nitrosodiphenylamine	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
4-Bromophenyl phenyl ether	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Hexachlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Pentachlorophenol	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Phenanthrene	**240**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Anthracene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Di-n-butyl phthalate	ND		2900		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Fluoranthene	**410**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Pyrene	**390**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Butyl benzyl phthalate	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
3,3'-Dichlorobenzidine	ND	*	1100		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzo[a]anthracene	**270**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Chrysene	**360**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Bis(2-ethylhexyl) phthalate	ND		3400		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Di-n-octyl phthalate	ND		2900		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzo[a]pyrene	**330**		170		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Indeno[1,2,3-cd]pyrene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Dibenz(a,h)anthracene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzo[g,h,i]perylene	**330**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Carbazole	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
1-Methylnaphthalene	**180**		170		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzo[b]fluoranthene	**510**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
Benzo[k]fluoranthene	**170**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5
bis (2-chloroisopropyl) ether	ND		1400		ug/Kg	☼	10/02/13 13:15	10/03/13 16:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*87*		*36 - 145*	*10/02/13 13:15*	*10/03/13 16:54*	*5*
Phenol-d5	*86*		*38 - 149*	*10/02/13 13:15*	*10/03/13 16:54*	*5*
Nitrobenzene-d5	*90*		*38 - 141*	*10/02/13 13:15*	*10/03/13 16:54*	*5*
2-Fluorobiphenyl	*78*		*42 - 140*	*10/02/13 13:15*	*10/03/13 16:54*	*5*
2,4,6-Tribromophenol	*76*		*28 - 143*	*10/02/13 13:15*	*10/03/13 16:54*	*5*
Terphenyl-d14	*90*		*42 - 151*	*10/02/13 13:15*	*10/03/13 16:54*	*5*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP3A-092013
Date Collected: 09/20/13 16:50
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-3
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1
PCB-1221	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1
PCB-1232	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1
PCB-1242	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1
PCB-1248	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1
PCB-1254	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1
PCB-1260	ND	*	0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*45 - 135*	*09/27/13 05:44*	*09/30/13 20:53*	*1*
DCB Decachlorobiphenyl	*97*		*50 - 140*	*09/27/13 05:44*	*09/30/13 20:53*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:33	10/14/13 09:15	1
Barium	**0.50**		0.010		mg/L		10/13/13 12:33	10/14/13 09:15	1
Cadmium	**0.028**		0.010		mg/L		10/13/13 12:33	10/14/13 09:15	1
Chromium	ND		0.025		mg/L		10/13/13 12:33	10/14/13 09:15	1
Lead	**1.7**		0.030		mg/L		10/13/13 12:33	10/14/13 09:15	1
Selenium	ND		0.10		mg/L		10/13/13 12:33	10/14/13 09:15	1
Silver	ND		0.050		mg/L		10/13/13 12:33	10/14/13 09:15	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**84**		0.10		%			09/27/13 11:47	1
Percent Moisture	**16**		0.10		%			09/27/13 11:47	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP4A-092013
Date Collected: 09/20/13 17:00
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-4
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,1,1-Trichloroethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,1,2-Trichloroethane	ND	H	13		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,1-Dichloroethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,1-Dichloroethene	ND	H	22		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,1-Dichloropropene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2,3-Trichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2,3-Trichloropropane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2,4-Trichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2,4-Trimethylbenzene	**78**	**H**	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2-Dibromo-3-Chloropropane	ND	H	220		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2-Dichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2-Dichloroethane	ND	H	17		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,2-Dichloropropane	ND	H	13		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,3,5-Trimethylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,3-Dichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,3-Dichloropropane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
1,4-Dichlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
2,2-Dichloropropane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
2-Chlorotoluene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
4-Chlorotoluene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
4-Isopropyltoluene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Acetone	ND	H	430		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Benzene	ND	H	17		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Bromobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Bromoform	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Bromomethane	ND	H	150		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Carbon tetrachloride	ND	H	22		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Chlorobenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Chlorobromomethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Chlorodibromomethane	ND	H	22		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Chloroethane	ND	H	430		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Chloroform	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Chloromethane	ND	H	430		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
cis-1,2-Dichloroethene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
cis-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Dibromomethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Dichlorobromomethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Dichlorodifluoromethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Ethylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Ethylene Dibromide	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Hexachlorobutadiene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Isopropylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Methyl tert-butyl ether	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Methylene Chloride	ND	H	17		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
m-Xylene & p-Xylene	**120**	**H**	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Naphthalene	**56**	**H**	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
n-Butylbenzene	**85**	**H**	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP4A-092013
Date Collected: 09/20/13 17:00
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-4
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
o-Xylene	**86**	**H**	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
sec-Butylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Styrene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
tert-Butylbenzene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Tetrachloroethene	ND	H	22		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Toluene	**87**	**H**	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
trans-1,2-Dichloroethene	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
trans-1,3-Dichloropropene	ND	H	17		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Trichloroethene	ND	H	17		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Trichlorofluoromethane	ND	H	43		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1
Vinyl chloride	ND	H	8.7		ug/Kg	☼	09/26/13 15:29	10/03/13 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*	*09/26/13 15:29*	*10/03/13 20:40*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*	*09/26/13 15:29*	*10/03/13 20:40*	*1*
Trifluorotoluene (Surr)	*79*		*65 - 140*	*09/26/13 15:29*	*10/03/13 20:40*	*1*
Dibromofluoromethane (Surr)	*83*		*75 - 125*	*09/26/13 15:29*	*10/03/13 20:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 136*	*09/26/13 15:29*	*10/03/13 20:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Bis(2-chloroethyl)ether	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2-Chlorophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
1,3-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
1,4-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzyl alcohol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
1,2-Dichlorobenzene	ND		320		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2-Methylphenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
3 & 4 Methylphenol	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
N-Nitrosodi-n-propylamine	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Hexachloroethane	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Nitrobenzene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Isophorone	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2-Nitrophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,4-Dimethylphenol	ND	*	580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzoic acid	ND		14000		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Bis(2-chloroethoxy)methane	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,4-Dichlorophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
1,2,4-Trichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Naphthalene	**130**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4-Chloroaniline	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Hexachlorobutadiene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4-Chloro-3-methylphenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2-Methylnaphthalene	**250**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Hexachlorocyclopentadiene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,4,6-Trichlorophenol	ND		870		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,4,5-Trichlorophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2-Chloronaphthalene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP4A-092013
Date Collected: 09/20/13 17:00
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-4
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Dimethyl phthalate	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Acenaphthylene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,6-Dinitrotoluene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
3-Nitroaniline	ND	*	580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Acenaphthene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,4-Dinitrophenol	ND		5800		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4-Nitrophenol	ND		5800		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Dibenzofuran	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
2,4-Dinitrotoluene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Diethyl phthalate	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4-Chlorophenyl phenyl ether	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Fluorene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4-Nitroaniline	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4,6-Dinitro-2-methylphenol	ND		5800		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
N-Nitrosodiphenylamine	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
4-Bromophenyl phenyl ether	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Hexachlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Pentachlorophenol	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Phenanthrene	**340**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Anthracene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Di-n-butyl phthalate	ND		2900		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Fluoranthene	**610**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Pyrene	**510**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Butyl benzyl phthalate	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
3,3'-Dichlorobenzidine	ND	*	1200		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzo[a]anthracene	**280**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Chrysene	**440**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Bis(2-ethylhexyl) phthalate	ND		3500		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Di-n-octyl phthalate	ND		2900		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzo[a]pyrene	**270**		170		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Indeno[1,2,3-cd]pyrene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Dibenz(a,h)anthracene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzo[g,h,i]perylene	**180**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Carbazole	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
1-Methylnaphthalene	**190**		170		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzo[b]fluoranthene	**550**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
Benzo[k]fluoranthene	**160**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5
bis (2-chloroisopropyl) ether	ND		1400		ug/Kg	☼	10/02/13 13:15	10/03/13 17:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*84*		*36 - 145*	*10/02/13 13:15*	*10/03/13 17:18*	*5*
Phenol-d5	*82*		*38 - 149*	*10/02/13 13:15*	*10/03/13 17:18*	*5*
Nitrobenzene-d5	*82*		*38 - 141*	*10/02/13 13:15*	*10/03/13 17:18*	*5*
2-Fluorobiphenyl	*76*		*42 - 140*	*10/02/13 13:15*	*10/03/13 17:18*	*5*
2,4,6-Tribromophenol	*73*		*28 - 143*	*10/02/13 13:15*	*10/03/13 17:18*	*5*
Terphenyl-d14	*82*		*42 - 151*	*10/02/13 13:15*	*10/03/13 17:18*	*5*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP4A-092013
Date Collected: 09/20/13 17:00
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-4
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1
PCB-1221	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1
PCB-1232	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1
PCB-1242	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1
PCB-1248	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1
PCB-1254	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1
PCB-1260	ND	*	0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*45 - 135*	*09/27/13 05:44*	*09/30/13 21:08*	*1*
DCB Decachlorobiphenyl	*92*		*50 - 140*	*09/27/13 05:44*	*09/30/13 21:08*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:33	10/14/13 09:19	1
Barium	**0.40**		0.010		mg/L		10/13/13 12:33	10/14/13 09:19	1
Cadmium	**0.015**		0.010		mg/L		10/13/13 12:33	10/14/13 09:19	1
Chromium	ND		0.025		mg/L		10/13/13 12:33	10/14/13 09:19	1
Lead	**0.47**		0.030		mg/L		10/13/13 12:33	10/14/13 09:19	1
Selenium	ND		0.10		mg/L		10/13/13 12:33	10/14/13 09:19	1
Silver	ND		0.050		mg/L		10/13/13 12:33	10/14/13 09:19	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**84**		0.10		%			09/27/13 11:47	1
Percent Moisture	**16**		0.10		%			09/27/13 11:47	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP5A-092013
Date Collected: 09/20/13 17:15
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-5
Matrix: Solid
Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,1,1-Trichloroethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,1,2,2-Tetrachloroethane	ND	H	11		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,1,2-Trichloroethane	ND	H	14		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,1-Dichloroethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,1-Dichloroethene	ND	H	23		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,1-Dichloropropene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2,3-Trichlorobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2,3-Trichloropropane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2,4-Trichlorobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2,4-Trimethylbenzene	**140**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2-Dibromo-3-Chloropropane	ND	H	230		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2-Dichlorobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2-Dichloroethane	ND	H	18		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,2-Dichloropropane	ND	H	14		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,3,5-Trimethylbenzene	**63**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,3-Dichlorobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,3-Dichloropropane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
1,4-Dichlorobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
2,2-Dichloropropane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
2-Chlorotoluene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
4-Chlorotoluene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
4-Isopropyltoluene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Acetone	ND	H	450		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Benzene	**27**	**H**	18		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Bromobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Bromoform	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Bromomethane	ND	H	160		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Carbon tetrachloride	ND	H	23		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Chlorobenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Chlorobromomethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Chlorodibromomethane	ND	H	23		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Chloroethane	ND	H	450		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Chloroform	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Chloromethane	ND	H	450		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
cis-1,2-Dichloroethene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
cis-1,3-Dichloropropene	ND	H	18		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Dibromomethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Dichlorobromomethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Dichlorodifluoromethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Ethylbenzene	**62**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Ethylene Dibromide	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Hexachlorobutadiene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Isopropylbenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Methyl tert-butyl ether	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Methylene Chloride	ND	H	18		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
m-Xylene & p-Xylene	**240**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Naphthalene	**86**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
n-Butylbenzene	**140**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP5A-092013
Date Collected: 09/20/13 17:15
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-5
Matrix: Solid
Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
o-Xylene	**140**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
sec-Butylbenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Styrene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
tert-Butylbenzene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Tetrachloroethene	ND	H	23		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Toluene	**240**	**H**	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
trans-1,2-Dichloroethene	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
trans-1,3-Dichloropropene	ND	H	18		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Trichloroethene	ND	H	18		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Trichlorofluoromethane	ND	H	45		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1
Vinyl chloride	ND	H	9.0		ug/Kg	☼	09/26/13 15:30	10/03/13 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 120*	*09/26/13 15:30*	*10/03/13 21:01*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*	*09/26/13 15:30*	*10/03/13 21:01*	*1*
Trifluorotoluene (Surr)	*84*		*65 - 140*	*09/26/13 15:30*	*10/03/13 21:01*	*1*
Dibromofluoromethane (Surr)	*79*		*75 - 125*	*09/26/13 15:30*	*10/03/13 21:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*71 - 136*	*09/26/13 15:30*	*10/03/13 21:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Bis(2-chloroethyl)ether	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2-Chlorophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
1,3-Dichlorobenzene	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
1,4-Dichlorobenzene	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzyl alcohol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
1,2-Dichlorobenzene	ND		310		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2-Methylphenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
3 & 4 Methylphenol	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
N-Nitrosodi-n-propylamine	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Hexachloroethane	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Nitrobenzene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Isophorone	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2-Nitrophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,4-Dimethylphenol	ND	*	570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzoic acid	ND		14000		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Bis(2-chloroethoxy)methane	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,4-Dichlorophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
1,2,4-Trichlorobenzene	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Naphthalene	**260**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4-Chloroaniline	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Hexachlorobutadiene	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4-Chloro-3-methylphenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2-Methylnaphthalene	**480**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Hexachlorocyclopentadiene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,4,6-Trichlorophenol	ND		850		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,4,5-Trichlorophenol	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2-Chloronaphthalene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP5A-092013
Date Collected: 09/20/13 17:15
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-5
Matrix: Solid
Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Dimethyl phthalate	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Acenaphthylene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,6-Dinitrotoluene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
3-Nitroaniline	ND	*	570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Acenaphthene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,4-Dinitrophenol	ND		5700		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4-Nitrophenol	ND		5700		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Dibenzofuran	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
2,4-Dinitrotoluene	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Diethyl phthalate	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4-Chlorophenyl phenyl ether	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Fluorene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4-Nitroaniline	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4,6-Dinitro-2-methylphenol	ND		5700		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
N-Nitrosodiphenylamine	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
4-Bromophenyl phenyl ether	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Hexachlorobenzene	ND		280		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Pentachlorophenol	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Phenanthrene	**310**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Anthracene	ND		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Di-n-butyl phthalate	ND		2800		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Fluoranthene	**440**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Pyrene	**430**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Butyl benzyl phthalate	ND		1100		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
3,3'-Dichlorobenzidine	ND	*	1100		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzo[a]anthracene	**260**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Chrysene	**410**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Bis(2-ethylhexyl) phthalate	ND		3400		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Di-n-octyl phthalate	ND		2800		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzo[a]pyrene	**300**		170		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Indeno[1,2,3-cd]pyrene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Dibenz(a,h)anthracene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzo[g,h,i]perylene	**240**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Carbazole	ND		570		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
1-Methylnaphthalene	**340**		170		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzo[b]fluoranthene	**480**		110		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
Benzo[k]fluoranthene	**160**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5
bis (2-chloroisopropyl) ether	ND		1400		ug/Kg	☼	10/02/13 13:15	10/03/13 17:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*84*		*36 - 145*	*10/02/13 13:15*	*10/03/13 17:42*	*5*
Phenol-d5	*85*		*38 - 149*	*10/02/13 13:15*	*10/03/13 17:42*	*5*
Nitrobenzene-d5	*82*		*38 - 141*	*10/02/13 13:15*	*10/03/13 17:42*	*5*
2-Fluorobiphenyl	*77*		*42 - 140*	*10/02/13 13:15*	*10/03/13 17:42*	*5*
2,4,6-Tribromophenol	*75*		*28 - 143*	*10/02/13 13:15*	*10/03/13 17:42*	*5*
Terphenyl-d14	*83*		*42 - 151*	*10/02/13 13:15*	*10/03/13 17:42*	*5*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP5A-092013
Date Collected: 09/20/13 17:15
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-5
Matrix: Solid
Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1
PCB-1221	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1
PCB-1232	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1
PCB-1242	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1
PCB-1248	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1
PCB-1254	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1
PCB-1260	ND	*	0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*45 - 135*	*09/27/13 05:44*	*09/30/13 21:22*	*1*
DCB Decachlorobiphenyl	*94*		*50 - 140*	*09/27/13 05:44*	*09/30/13 21:22*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:33	10/14/13 09:22	1
Barium	**0.32**		0.010		mg/L		10/13/13 12:33	10/14/13 09:22	1
Cadmium	**0.024**		0.010		mg/L		10/13/13 12:33	10/14/13 09:22	1
Chromium	ND		0.025		mg/L		10/13/13 12:33	10/14/13 09:22	1
Lead	**0.74**		0.030		mg/L		10/13/13 12:33	10/14/13 09:22	1
Selenium	ND		0.10		mg/L		10/13/13 12:33	10/14/13 09:22	1
Silver	ND		0.050		mg/L		10/13/13 12:33	10/14/13 09:22	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**85**		0.10		%			09/27/13 11:47	1
Percent Moisture	**15**		0.10		%			09/27/13 11:47	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP6A-092013
Date Collected: 09/20/13 17:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-6
Matrix: Solid
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,1,1-Trichloroethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,1,2,2-Tetrachloroethane	ND	H	12		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,1,2-Trichloroethane	ND	H	14		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,1-Dichloroethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,1-Dichloroethene	ND	H	24		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,1-Dichloropropene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2,3-Trichlorobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2,3-Trichloropropane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2,4-Trichlorobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2,4-Trimethylbenzene	**64**	**H**	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2-Dibromo-3-Chloropropane	ND	H	240		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2-Dichlorobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2-Dichloroethane	ND	H	19		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,2-Dichloropropane	ND	H	14		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,3,5-Trimethylbenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,3-Dichlorobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,3-Dichloropropane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
1,4-Dichlorobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
2,2-Dichloropropane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
2-Chlorotoluene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
4-Chlorotoluene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
4-Isopropyltoluene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Acetone	ND	H	480		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Benzene	ND	H	19		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Bromobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Bromoform	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Bromomethane	ND	H	170		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Carbon tetrachloride	ND	H	24		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Chlorobenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Chlorobromomethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Chlorodibromomethane	ND	H	24		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Chloroethane	ND	H	480		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Chloroform	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Chloromethane	ND	H	480		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
cis-1,2-Dichloroethene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
cis-1,3-Dichloropropene	ND	H	19		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Dibromomethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Dichlorobromomethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Dichlorodifluoromethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Ethylbenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Ethylene Dibromide	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Hexachlorobutadiene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Isopropylbenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Methyl tert-butyl ether	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Methylene Chloride	ND	H	19		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
m-Xylene & p-Xylene	**91**	**H**	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Naphthalene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
n-Butylbenzene	**89**	**H**	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP6A-092013
Date Collected: 09/20/13 17:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-6
Matrix: Solid
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
o-Xylene	**54**	**H**	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
sec-Butylbenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Styrene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
tert-Butylbenzene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Tetrachloroethene	ND	H	24		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Toluene	**68**	**H**	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
trans-1,2-Dichloroethene	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
trans-1,3-Dichloropropene	ND	H	19		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Trichloroethene	ND	H	19		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Trichlorofluoromethane	ND	H	48		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1
Vinyl chloride	ND	H	9.6		ug/Kg	☼	09/26/13 15:32	10/03/13 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 120*	*09/26/13 15:32*	*10/03/13 21:23*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*	*09/26/13 15:32*	*10/03/13 21:23*	*1*
Trifluorotoluene (Surr)	*85*		*65 - 140*	*09/26/13 15:32*	*10/03/13 21:23*	*1*
Dibromofluoromethane (Surr)	*80*		*75 - 125*	*09/26/13 15:32*	*10/03/13 21:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*71 - 136*	*09/26/13 15:32*	*10/03/13 21:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Bis(2-chloroethyl)ether	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2-Chlorophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
1,3-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
1,4-Dichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzyl alcohol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
1,2-Dichlorobenzene	ND		320		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2-Methylphenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
3 & 4 Methylphenol	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
N-Nitrosodi-n-propylamine	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Hexachloroethane	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Nitrobenzene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Isophorone	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2-Nitrophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,4-Dimethylphenol	ND	*	580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzoic acid	ND		14000		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Bis(2-chloroethoxy)methane	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,4-Dichlorophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
1,2,4-Trichlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Naphthalene	**120**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4-Chloroaniline	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Hexachlorobutadiene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4-Chloro-3-methylphenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2-Methylnaphthalene	**210**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Hexachlorocyclopentadiene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,4,6-Trichlorophenol	ND		870		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,4,5-Trichlorophenol	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2-Chloronaphthalene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP6A-092013
Date Collected: 09/20/13 17:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-6
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Dimethyl phthalate	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Acenaphthylene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,6-Dinitrotoluene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
3-Nitroaniline	ND	*	580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Acenaphthene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,4-Dinitrophenol	ND		5800		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4-Nitrophenol	ND		5800		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Dibenzofuran	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
2,4-Dinitrotoluene	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Diethyl phthalate	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4-Chlorophenyl phenyl ether	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Fluorene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4-Nitroaniline	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4,6-Dinitro-2-methylphenol	ND		5800		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
N-Nitrosodiphenylamine	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
4-Bromophenyl phenyl ether	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Hexachlorobenzene	ND		290		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Pentachlorophenol	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Phenanthrene	**210**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Anthracene	ND		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Di-n-butyl phthalate	ND		2900		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Fluoranthene	**380**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Pyrene	**330**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Butyl benzyl phthalate	ND		1200		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
3,3'-Dichlorobenzidine	ND	*	1200		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzo[a]anthracene	**150**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Chrysene	**290**		140		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Bis(2-ethylhexyl) phthalate	ND		3500		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Di-n-octyl phthalate	ND		2900		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzo[a]pyrene	ND		170		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Indeno[1,2,3-cd]pyrene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Dibenz(a,h)anthracene	ND		230		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzo[g,h,i]perylene	ND		140		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Carbazole	ND		580		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
1-Methylnaphthalene	ND		170		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzo[b]fluoranthene	**340**		120		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
Benzo[k]fluoranthene	ND		140		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5
bis (2-chloroisopropyl) ether	ND		1400		ug/Kg	☼	10/02/13 13:15	10/03/13 18:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*83*		*36 - 145*	*10/02/13 13:15*	*10/03/13 18:06*	*5*
Phenol-d5	*81*		*38 - 149*	*10/02/13 13:15*	*10/03/13 18:06*	*5*
Nitrobenzene-d5	*85*		*38 - 141*	*10/02/13 13:15*	*10/03/13 18:06*	*5*
2-Fluorobiphenyl	*77*		*42 - 140*	*10/02/13 13:15*	*10/03/13 18:06*	*5*
2,4,6-Tribromophenol	*74*		*28 - 143*	*10/02/13 13:15*	*10/03/13 18:06*	*5*
Terphenyl-d14	*89*		*42 - 151*	*10/02/13 13:15*	*10/03/13 18:06*	*5*

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP6A-092013
Date Collected: 09/20/13 17:30
Date Received: 09/24/13 09:45

Lab Sample ID: 580-40501-6
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1
PCB-1221	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1
PCB-1232	ND		0.013		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1
PCB-1242	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1
PCB-1248	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1
PCB-1254	ND		0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1
PCB-1260	ND	*	0.012		mg/Kg	☼	09/27/13 05:44	09/30/13 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*45 - 135*	*09/27/13 05:44*	*09/30/13 21:36*	*1*
DCB Decachlorobiphenyl	*104*		*50 - 140*	*09/27/13 05:44*	*09/30/13 21:36*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:33	10/14/13 08:44	1
Barium	**0.40**		0.010		mg/L		10/13/13 12:33	10/14/13 08:44	1
Cadmium	**0.012**		0.010		mg/L		10/13/13 12:33	10/14/13 08:44	1
Chromium	ND		0.025		mg/L		10/13/13 12:33	10/14/13 08:44	1
Lead	**0.93**		0.030		mg/L		10/13/13 12:33	10/14/13 08:44	1
Selenium	ND		0.10		mg/L		10/13/13 12:33	10/14/13 08:44	1
Silver	ND		0.050		mg/L		10/13/13 12:33	10/14/13 08:44	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**82**		0.10		%			09/27/13 11:47	1
Percent Moisture	**18**		0.10		%			09/27/13 11:47	1

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-146490/1-A
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146490

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,1,1-Trichloroethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,1,2,2-Tetrachloroethane	ND		10		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,1,2-Trichloroethane	ND		12		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,1-Dichloroethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,1-Dichloroethene	ND		20		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,1-Dichloropropene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2,3-Trichlorobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2,3-Trichloropropane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2,4-Trichlorobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2,4-Trimethylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2-Dibromo-3-Chloropropane	ND		200		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2-Dichlorobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2-Dichloroethane	ND		16		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,2-Dichloropropane	ND		12		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,3,5-Trimethylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,3-Dichlorobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,3-Dichloropropane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
1,4-Dichlorobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
2,2-Dichloropropane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
2-Chlorotoluene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
4-Chlorotoluene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
4-Isopropyltoluene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Acetone	ND		400		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Benzene	ND		16		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Bromobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Bromoform	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Bromomethane	ND		140		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Carbon tetrachloride	ND		20		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Chlorobenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Chlorobromomethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Chlorodibromomethane	ND		20		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Chloroethane	ND		400		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Chloroform	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Chloromethane	ND		400		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
cis-1,2-Dichloroethene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
cis-1,3-Dichloropropene	ND		16		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Dibromomethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Dichlorobromomethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Dichlorodifluoromethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Ethylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Ethylene Dibromide	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Hexachlorobutadiene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Isopropylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Methyl tert-butyl ether	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Methylene Chloride	ND		16		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
m-Xylene & p-Xylene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Naphthalene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-146490/1-A
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146490

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
N-Propylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
o-Xylene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
sec-Butylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Styrene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
tert-Butylbenzene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Tetrachloroethene	ND		20		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Toluene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
trans-1,2-Dichloroethene	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
trans-1,3-Dichloropropene	ND		16		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Trichloroethene	ND		16		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Trichlorofluoromethane	ND		40		ug/Kg		10/03/13 12:41	10/03/13 13:27	1
Vinyl chloride	ND		8.0		ug/Kg		10/03/13 12:41	10/03/13 13:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 120*	*10/03/13 12:41*	*10/03/13 13:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*	*10/03/13 12:41*	*10/03/13 13:27*	*1*
Trifluorotoluene (Surr)	*100*		*65 - 140*	*10/03/13 12:41*	*10/03/13 13:27*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 125*	*10/03/13 12:41*	*10/03/13 13:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 136*	*10/03/13 12:41*	*10/03/13 13:27*	*1*

Lab Sample ID: LCS 580-146490/2-A
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146490

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	800	694		ug/Kg		87	72 - 123
1,1,1-Trichloroethane	800	728		ug/Kg		91	63 - 135
1,1,2,2-Tetrachloroethane	800	848		ug/Kg		106	73 - 125
1,1,2-Trichloroethane	800	798		ug/Kg		100	77 - 124
1,1-Dichloroethane	800	830		ug/Kg		104	70 - 128
1,1-Dichloroethene	800	766		ug/Kg		96	70 - 133
1,1-Dichloropropene	800	833		ug/Kg		104	77 - 123
1,2,3-Trichlorobenzene	800	728		ug/Kg		91	61 - 130
1,2,3-Trichloropropane	800	806		ug/Kg		101	77 - 123
1,2,4-Trichlorobenzene	800	735		ug/Kg		92	61 - 130
1,2,4-Trimethylbenzene	800	829		ug/Kg		104	79 - 124
1,2-Dibromo-3-Chloropropane	800	640		ug/Kg		80	53 - 132
1,2-Dichlorobenzene	800	796		ug/Kg		99	79 - 117
1,2-Dichloroethane	800	720		ug/Kg		90	71 - 128
1,2-Dichloropropane	800	1100		ug/Kg		137	76 - 161
1,3,5-Trimethylbenzene	800	851		ug/Kg		106	80 - 125
1,3-Dichlorobenzene	800	779		ug/Kg		97	79 - 119
1,3-Dichloropropane	800	792		ug/Kg		99	77 - 123
1,4-Dichlorobenzene	800	789		ug/Kg		99	79 - 117
2,2-Dichloropropane	800	755		ug/Kg		94	56 - 144
2-Chlorotoluene	800	815		ug/Kg		102	79 - 122
4-Chlorotoluene	800	815		ug/Kg		102	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-146490/2-A
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146490

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	800	823		ug/Kg		103	78 - 126
Acetone	3200	2870		ug/Kg		90	20 - 160
Benzene	800	820		ug/Kg		103	70 - 128
Bromobenzene	800	806		ug/Kg		101	80 - 120
Bromoform	800	613		ug/Kg		77	50 - 124
Bromomethane	800	687		ug/Kg		86	57 - 148
Carbon tetrachloride	800	676		ug/Kg		84	59 - 145
Chlorobenzene	800	806		ug/Kg		101	75 - 120
Chlorobromomethane	800	806		ug/Kg		101	78 - 123
Chlorodibromomethane	800	732		ug/Kg		92	69 - 129
Chloroethane	800	750		ug/Kg		94	48 - 167
Chloroform	800	808		ug/Kg		101	78 - 125
Chloromethane	800	836		ug/Kg		105	55 - 136
cis-1,2-Dichloroethene	800	796		ug/Kg		100	70 - 130
cis-1,3-Dichloropropene	800	812		ug/Kg		102	69 - 129
Dibromomethane	800	736		ug/Kg		92	78 - 126
Dichlorobromomethane	800	666		ug/Kg		83	58 - 133
Dichlorodifluoromethane	800	743		ug/Kg		93	38 - 150
Ethylbenzene	800	808		ug/Kg		101	78 - 126
Ethylene Dibromide	800	752		ug/Kg		94	69 - 126
Hexachlorobutadiene	800	739		ug/Kg		92	68 - 134
Isopropylbenzene	800	810		ug/Kg		101	79 - 127
Methyl tert-butyl ether	800	748		ug/Kg		94	65 - 125
Methylene Chloride	800	813		ug/Kg		102	57 - 146
m-Xylene & p-Xylene	800	791		ug/Kg		99	78 - 126
Naphthalene	800	753		ug/Kg		94	14 - 170
n-Butylbenzene	800	848		ug/Kg		106	78 - 128
N-Propylbenzene	800	845		ug/Kg		106	81 - 127
o-Xylene	800	800		ug/Kg		100	77 - 127
sec-Butylbenzene	800	839		ug/Kg		105	78 - 128
Styrene	800	846		ug/Kg		106	79 - 127
tert-Butylbenzene	800	846		ug/Kg		106	71 - 136
Tetrachloroethene	800	765		ug/Kg		96	56 - 150
Toluene	800	786		ug/Kg		98	75 - 126
trans-1,2-Dichloroethene	800	835		ug/Kg		104	76 - 131
trans-1,3-Dichloropropene	800	767		ug/Kg		96	72 - 129
Trichloroethene	800	806		ug/Kg		101	83 - 124
Trichlorofluoromethane	800	671		ug/Kg		84	47 - 165
Vinyl chloride	800	871		ug/Kg		109	67 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*65 - 140*
Dibromofluoromethane (Surr)	*104*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 136*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-40501-6 MS
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: WFE-SP6A-092013
Prep Type: Total/NA
Prep Batch: 146490

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND	H	962	632	F	ug/Kg	☼	66	75 - 125
1,1,1-Trichloroethane	ND	H	962	720		ug/Kg	☼	75	70 - 135
1,1,2,2-Tetrachloroethane	ND	H	962	740		ug/Kg	☼	77	55 - 130
1,1,2-Trichloroethane	ND	H	962	751		ug/Kg	☼	78	60 - 125
1,1-Dichloroethane	ND	H	962	804		ug/Kg	☼	84	75 - 125
1,1-Dichloroethene	ND	H	962	759		ug/Kg	☼	79	65 - 135
1,1-Dichloropropene	ND	H	962	787		ug/Kg	☼	82	70 - 135
1,2,3-Trichlorobenzene	ND	H	962	415	F	ug/Kg	☼	43	60 - 135
1,2,3-Trichloropropane	ND	H	962	733		ug/Kg	☼	76	65 - 130
1,2,4-Trichlorobenzene	ND	H	962	410	F	ug/Kg	☼	43	65 - 130
1,2,4-Trimethylbenzene	64	H	962	709		ug/Kg	☼	67	65 - 135
1,2-Dibromo-3-Chloropropane	ND	H	962	511		ug/Kg	☼	53	40 - 135
1,2-Dichlorobenzene	ND	H	962	548	F	ug/Kg	☼	57	75 - 120
1,2-Dichloroethane	ND	H	962	653	F	ug/Kg	☼	68	70 - 135
1,2-Dichloropropane	ND	H	962	1090		ug/Kg	☼	113	70 - 120
1,3,5-Trimethylbenzene	ND	H	962	730		ug/Kg	☼	73	65 - 135
1,3-Dichlorobenzene	ND	H	962	538	F	ug/Kg	☼	56	70 - 125
1,3-Dichloropropane	ND	H	962	735		ug/Kg	☼	76	75 - 125
1,4-Dichlorobenzene	ND	H	962	507	F	ug/Kg	☼	53	70 - 125
2,2-Dichloropropane	ND	H	962	732		ug/Kg	☼	76	65 - 135
2-Chlorotoluene	ND	H	962	633	F	ug/Kg	☼	66	70 - 130
4-Chlorotoluene	ND	H	962	591	F	ug/Kg	☼	61	75 - 125
4-Isopropyltoluene	ND	H	962	782		ug/Kg	☼	80	75 - 135
Acetone	ND	H	3850	1900		ug/Kg	☼	49	20 - 160
Benzene	ND	H	962	747		ug/Kg	☼	77	75 - 125
Bromobenzene	ND	H	962	617	F	ug/Kg	☼	64	65 - 120
Bromoform	ND	H	962	522	F	ug/Kg	☼	54	55 - 135
Bromomethane	ND	H	962	844		ug/Kg	☼	88	30 - 160
Carbon tetrachloride	ND	H	962	634		ug/Kg	☼	66	65 - 135
Chlorobenzene	ND	H	962	650	F	ug/Kg	☼	68	75 - 125
Chlorobromomethane	ND	H	962	754		ug/Kg	☼	78	70 - 125
Chlorodibromomethane	ND	H	962	627		ug/Kg	☼	65	65 - 130
Chloroethane	ND	H	962	861		ug/Kg	☼	90	40 - 155
Chloroform	ND	H	962	802		ug/Kg	☼	83	70 - 125
Chloromethane	ND	H	961	993		ug/Kg	☼	103	50 - 130
cis-1,2-Dichloroethene	ND	H	962	735		ug/Kg	☼	76	65 - 125
cis-1,3-Dichloropropene	ND	H	962	706		ug/Kg	☼	73	70 - 125
Dibromomethane	ND	H	962	627	F	ug/Kg	☼	65	75 - 130
Dichlorobromomethane	ND	H	962	603	F	ug/Kg	☼	63	70 - 130
Dichlorodifluoromethane	ND	H	962	885		ug/Kg	☼	92	35 - 135
Ethylbenzene	ND	H	962	766		ug/Kg	☼	77	75 - 125
Ethylene Dibromide	ND	H	962	693		ug/Kg	☼	72	70 - 125
Hexachlorobutadiene	ND	H	962	928		ug/Kg	☼	97	55 - 140
Isopropylbenzene	ND	H	962	759		ug/Kg	☼	79	75 - 130
Methyl tert-butyl ether	ND	H	962	740		ug/Kg	☼	77	59 - 137
Methylene Chloride	ND	H	962	849		ug/Kg	☼	88	55 - 140
m-Xylene & p-Xylene	91	H	962	760	F	ug/Kg	☼	70	80 - 125
Naphthalene	ND	H	962	364	F	ug/Kg	☼	35	40 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-40501-6 MS
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: WFE-SP6A-092013
Prep Type: Total/NA
Prep Batch: 146490

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	89	H	962	824		ug/Kg	☼	76	65 - 140
N-Propylbenzene	ND	H	962	737		ug/Kg	☼	75	65 - 135
o-Xylene	54	H	962	719	F	ug/Kg	☼	69	75 - 125
sec-Butylbenzene	ND	H	962	808		ug/Kg	☼	84	65 - 130
Styrene	ND	H	962	553	F	ug/Kg	☼	58	75 - 125
tert-Butylbenzene	ND	H	962	793		ug/Kg	☼	82	65 - 130
Tetrachloroethene	ND	H	962	667		ug/Kg	☼	69	65 - 140
Toluene	68	H	962	753		ug/Kg	☼	71	70 - 125
trans-1,2-Dichloroethene	ND	H	962	770		ug/Kg	☼	80	65 - 135
trans-1,3-Dichloropropene	ND	H	962	674		ug/Kg	☼	70	65 - 125
Trichloroethene	ND	H	962	742		ug/Kg	☼	77	75 - 125
Trichlorofluoromethane	ND	H	961	759		ug/Kg	☼	79	25 - 185
Vinyl chloride	ND	H	962	1020		ug/Kg	☼	107	60 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Trifluorotoluene (Surr)	*85*		*65 - 140*
Dibromofluoromethane (Surr)	*104*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*89*		*71 - 136*

Lab Sample ID: 580-40501-6 MSD
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: WFE-SP6A-092013
Prep Type: Total/NA
Prep Batch: 146490

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	H	887	785		ug/Kg	☼	88	75 - 125	22	30
1,1,1-Trichloroethane	ND	H	887	870		ug/Kg	☼	98	70 - 135	19	30
1,1,2,2-Tetrachloroethane	ND	H	887	935		ug/Kg	☼	105	55 - 130	23	30
1,1,2-Trichloroethane	ND	H	887	940		ug/Kg	☼	106	60 - 125	22	30
1,1-Dichloroethane	ND	H	887	978		ug/Kg	☼	110	75 - 125	19	30
1,1-Dichloroethene	ND	H	887	931		ug/Kg	☼	105	65 - 135	20	30
1,1-Dichloropropene	ND	H	887	924		ug/Kg	☼	104	70 - 135	16	30
1,2,3-Trichlorobenzene	ND	H	887	512	F	ug/Kg	☼	58	60 - 135	21	30
1,2,3-Trichloropropane	ND	H	887	906		ug/Kg	☼	102	65 - 130	21	30
1,2,4-Trichlorobenzene	ND	H	887	530	F	ug/Kg	☼	60	65 - 130	26	30
1,2,4-Trimethylbenzene	64	H	887	858		ug/Kg	☼	89	65 - 135	19	30
1,2-Dibromo-3-Chloropropane	ND	H	887	643		ug/Kg	☼	72	40 - 135	23	30
1,2-Dichlorobenzene	ND	H	887	683		ug/Kg	☼	77	75 - 120	22	30
1,2-Dichloroethane	ND	H	887	843		ug/Kg	☼	95	70 - 135	25	30
1,2-Dichloropropane	ND	H	887	1310	F	ug/Kg	☼	148	70 - 120	18	30
1,3,5-Trimethylbenzene	ND	H	887	902		ug/Kg	☼	98	65 - 135	21	30
1,3-Dichlorobenzene	ND	H	887	659		ug/Kg	☼	74	70 - 125	20	30
1,3-Dichloropropane	ND	H	887	951		ug/Kg	☼	107	75 - 125	26	30
1,4-Dichlorobenzene	ND	H	887	629		ug/Kg	☼	71	70 - 125	22	30
2,2-Dichloropropane	ND	H	887	770		ug/Kg	☼	87	65 - 135	5	30
2-Chlorotoluene	ND	H	887	735		ug/Kg	☼	83	70 - 130	15	30
4-Chlorotoluene	ND	H	887	712		ug/Kg	☼	80	75 - 125	19	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 580-40501-6 MSD
Matrix: Solid
Analysis Batch: 146517

Client Sample ID: WFE-SP6A-092013
Prep Type: Total/NA
Prep Batch: 146490

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Isopropyltoluene	ND	H	887	980		ug/Kg	☼	109	75 - 135	23	30
Acetone	ND	H	3550	2790	F	ug/Kg	☼	79	20 - 160	38	30
Benzene	ND	H	887	890		ug/Kg	☼	99	75 - 125	17	30
Bromobenzene	ND	H	887	734		ug/Kg	☼	83	65 - 120	17	30
Bromoform	ND	H	887	703		ug/Kg	☼	79	55 - 135	30	30
Bromomethane	ND	H	887	939		ug/Kg	☼	106	30 - 160	11	30
Carbon tetrachloride	ND	H	887	813		ug/Kg	☼	92	65 - 135	25	30
Chlorobenzene	ND	H	887	756		ug/Kg	☼	85	75 - 125	15	30
Chlorobromomethane	ND	H	887	906		ug/Kg	☼	102	70 - 125	18	30
Chlorodibromomethane	ND	H	887	856	F	ug/Kg	☼	97	65 - 130	31	30
Chloroethane	ND	H	887	899		ug/Kg	☼	101	40 - 155	4	30
Chloroform	ND	H	887	946		ug/Kg	☼	107	70 - 125	17	30
Chloromethane	ND	H	887	1190	F	ug/Kg	☼	135	50 - 130	18	30
cis-1,2-Dichloroethene	ND	H	887	866		ug/Kg	☼	98	65 - 125	16	30
cis-1,3-Dichloropropene	ND	H	887	886		ug/Kg	☼	100	70 - 125	23	30
Dibromomethane	ND	H	887	805		ug/Kg	☼	91	75 - 130	25	30
Dichlorobromomethane	ND	H	887	793		ug/Kg	☼	89	70 - 130	27	30
Dichlorodifluoromethane	ND	H	887	1010		ug/Kg	☼	114	35 - 135	14	30
Ethylbenzene	ND	H	887	908		ug/Kg	☼	100	75 - 125	17	30
Ethylene Dibromide	ND	H	887	860		ug/Kg	☼	97	70 - 125	21	30
Hexachlorobutadiene	ND	H	887	972		ug/Kg	☼	110	55 - 140	5	30
Isopropylbenzene	ND	H	887	916		ug/Kg	☼	103	75 - 130	19	30
Methyl tert-butyl ether	ND	H	887	926		ug/Kg	☼	104	59 - 137	22	30
Methylene Chloride	ND	H	887	929		ug/Kg	☼	105	55 - 140	9	30
m-Xylene & p-Xylene	91	H	887	905		ug/Kg	☼	92	80 - 125	17	30
Naphthalene	ND	H	887	444		ug/Kg	☼	46	40 - 125	20	30
n-Butylbenzene	89	H	887	1080		ug/Kg	☼	112	65 - 140	27	30
N-Propylbenzene	ND	H	887	900		ug/Kg	☼	99	65 - 135	20	30
o-Xylene	54	H	887	862		ug/Kg	☼	91	75 - 125	18	30
sec-Butylbenzene	ND	H	887	997		ug/Kg	☼	112	65 - 130	21	30
Styrene	ND	H	887	660	F	ug/Kg	☼	74	75 - 125	18	30
tert-Butylbenzene	ND	H	887	986		ug/Kg	☼	111	65 - 130	22	30
Tetrachloroethene	ND	H	887	760		ug/Kg	☼	86	65 - 140	13	30
Toluene	68	H	887	896		ug/Kg	☼	93	70 - 125	17	30
trans-1,2-Dichloroethene	ND	H	887	908		ug/Kg	☼	102	65 - 135	16	30
trans-1,3-Dichloropropene	ND	H	887	877		ug/Kg	☼	99	65 - 125	26	30
Trichloroethene	ND	H	887	922		ug/Kg	☼	104	75 - 125	22	30
Trichlorofluoromethane	ND	H	887	820		ug/Kg	☼	92	25 - 185	8	30
Vinyl chloride	ND	H	887	1200	F	ug/Kg	☼	135	60 - 125	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Trifluorotoluene (Surr)	*103*		*65 - 140*
Dibromofluoromethane (Surr)	*102*		*75 - 125*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 136*

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

Lab Sample ID: MB 580-146384/1-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Bis(2-chloroethyl)ether	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Chlorophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,3-Dichlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,4-Dichlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzyl alcohol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,2-Dichlorobenzene	ND		55		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Methylphenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
3 & 4 Methylphenol	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
N-Nitrosodi-n-propylamine	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachloroethane	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Nitrobenzene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Isophorone	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Nitrophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dimethylphenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzoic acid	ND		2500		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Bis(2-chloroethoxy)methane	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dichlorophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1,2,4-Trichlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Naphthalene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Chloroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachlorobutadiene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Chloro-3-methylphenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Methylnaphthalene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachlorocyclopentadiene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4,6-Trichlorophenol	ND		150		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4,5-Trichlorophenol	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Chloronaphthalene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2-Nitroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Dimethyl phthalate	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Acenaphthylene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,6-Dinitrotoluene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
3-Nitroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Acenaphthene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dinitrophenol	ND		1000		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Nitrophenol	ND		1000		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Dibenzofuran	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
2,4-Dinitrotoluene	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Diethyl phthalate	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Chlorophenyl phenyl ether	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Fluorene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Nitroaniline	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4,6-Dinitro-2-methylphenol	ND		1000		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
N-Nitrosodiphenylamine	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
4-Bromophenyl phenyl ether	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Hexachlorobenzene	ND		50		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Pentachlorophenol	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Phenanthrene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1

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

Lab Sample ID: MB 580-146384/1-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Di-n-butyl phthalate	ND		500		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Fluoranthene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Pyrene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Butyl benzyl phthalate	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
3,3'-Dichlorobenzidine	ND		200		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[a]anthracene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Chrysene	ND		25		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Bis(2-ethylhexyl) phthalate	ND		600		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Di-n-octyl phthalate	ND		500		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[a]pyrene	ND		30		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Indeno[1,2,3-cd]pyrene	ND		40		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Dibenz(a,h)anthracene	ND		40		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[g,h,i]perylene	ND		25		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Carbazole	ND		100		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
1-Methylnaphthalene	ND		30		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[b]fluoranthene	ND		20		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
Benzo[k]fluoranthene	ND		25		ug/Kg		10/02/13 12:47	10/02/13 17:58	1
bis (2-chloroisopropyl) ether	ND		250		ug/Kg		10/02/13 12:47	10/02/13 17:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*82*		*36 - 145*	*10/02/13 12:47*	*10/02/13 17:58*	*1*
Phenol-d5	*78*		*38 - 149*	*10/02/13 12:47*	*10/02/13 17:58*	*1*
Nitrobenzene-d5	*75*		*38 - 141*	*10/02/13 12:47*	*10/02/13 17:58*	*1*
2-Fluorobiphenyl	*71*		*42 - 140*	*10/02/13 12:47*	*10/02/13 17:58*	*1*
2,4,6-Tribromophenol	*63*		*28 - 143*	*10/02/13 12:47*	*10/02/13 17:58*	*1*
Terphenyl-d14	*80*		*42 - 151*	*10/02/13 12:47*	*10/02/13 17:58*	*1*

Lab Sample ID: LCS 580-146384/2-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	999	1130		ug/Kg		113	66 - 126
Bis(2-chloroethyl)ether	998	873		ug/Kg		88	57 - 122
2-Chlorophenol	1000	1170		ug/Kg		117	65 - 125
1,3-Dichlorobenzene	1000	958		ug/Kg		96	64 - 124
1,4-Dichlorobenzene	1010	954		ug/Kg		94	62 - 132
Benzyl alcohol	997	850		ug/Kg		85	42 - 147
1,2-Dichlorobenzene	1010	923		ug/Kg		92	68 - 118
2-Methylphenol	997	937		ug/Kg		94	56 - 121
3 & 4 Methylphenol	1000	1060		ug/Kg		106	61 - 126
N-Nitrosodi-n-propylamine	1000	955		ug/Kg		95	52 - 127
Hexachloroethane	1010	927		ug/Kg		92	56 - 131
Nitrobenzene	1020	1010		ug/Kg		99	59 - 134
Isophorone	988	1090		ug/Kg		110	53 - 118
2-Nitrophenol	1010	1190		ug/Kg		119	58 - 128
2,4-Dimethylphenol	1010	1430	*	ug/Kg		142	58 - 133

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

Lab Sample ID: LCS 580-146384/2-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzoic acid	5090	4840		ug/Kg		95	10 - 130
Bis(2-chloroethoxy)methane	998	915		ug/Kg		92	63 - 128
2,4-Dichlorophenol	1020	1200		ug/Kg		118	59 - 124
1,2,4-Trichlorobenzene	1000	903		ug/Kg		90	63 - 128
Naphthalene	1010	888		ug/Kg		88	64 - 129
4-Chloroaniline	983	276		ug/Kg		28	20 - 181
Hexachlorobutadiene	1000	908		ug/Kg		91	59 - 134
4-Chloro-3-methylphenol	1010	1110		ug/Kg		110	58 - 128
2-Methylnaphthalene	991	899		ug/Kg		91	65 - 125
Hexachlorocyclopentadiene	1000	719		ug/Kg		72	30 - 132
2,4,6-Trichlorophenol	1010	986		ug/Kg		98	66 - 131
2,4,5-Trichlorophenol	1010	904		ug/Kg		89	64 - 124
2-Chloronaphthalene	1000	910		ug/Kg		91	69 - 129
2-Nitroaniline	983	844		ug/Kg		86	58 - 133
Dimethyl phthalate	1000	1020		ug/Kg		102	65 - 125
Acenaphthylene	1000	968		ug/Kg		97	69 - 129
2,6-Dinitrotoluene	1000	902		ug/Kg		90	65 - 125
3-Nitroaniline	987	372	*	ug/Kg		38	80 - 165
Acenaphthene	1000	874		ug/Kg		87	65 - 130
2,4-Dinitrophenol	5060	3730		ug/Kg		74	53 - 168
4-Nitrophenol	5030	4450		ug/Kg		88	47 - 172
Dibenzofuran	1010	924		ug/Kg		92	70 - 125
2,4-Dinitrotoluene	1000	990		ug/Kg		99	57 - 122
Diethyl phthalate	1000	936		ug/Kg		93	64 - 129
4-Chlorophenyl phenyl ether	992	939		ug/Kg		95	65 - 130
Fluorene	1010	940		ug/Kg		93	68 - 128
4-Nitroaniline	991	732		ug/Kg		74	70 - 150
4,6-Dinitro-2-methylphenol	5060	4620		ug/Kg		91	38 - 143
N-Nitrosodiphenylamine	1000	1080		ug/Kg		108	88 - 153
4-Bromophenyl phenyl ether	1000	947		ug/Kg		95	64 - 134
Hexachlorobenzene	1000	924		ug/Kg		92	61 - 136
Pentachlorophenol	1000	1000		ug/Kg		100	29 - 124
Phenanthrene	1000	848		ug/Kg		85	65 - 125
Anthracene	1010	907		ug/Kg		90	73 - 123
Di-n-butyl phthalate	1000	969		ug/Kg		97	69 - 124
Fluoranthene	1000	948		ug/Kg		95	61 - 121
Pyrene	998	899		ug/Kg		90	54 - 134
Butyl benzyl phthalate	1000	952		ug/Kg		95	65 - 140
3,3'-Dichlorobenzidine	1980	1050	*	ug/Kg		53	73 - 163
Benzo[a]anthracene	1000	887		ug/Kg		88	64 - 124
Chrysene	992	860		ug/Kg		87	71 - 126
Bis(2-ethylhexyl) phthalate	1000	1000		ug/Kg		100	64 - 144
Di-n-octyl phthalate	1010	908		ug/Kg		90	58 - 148
Benzo[a]pyrene	1000	896		ug/Kg		90	68 - 128
Indeno[1,2,3-cd]pyrene	998	869		ug/Kg		87	59 - 139
Dibenz(a,h)anthracene	1000	951		ug/Kg		95	57 - 142
Benzo[g,h,i]perylene	1010	1060		ug/Kg		105	57 - 142
Carbazole	1010	924		ug/Kg		92	88 - 158

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

Lab Sample ID: LCS 580-146384/2-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	997	941		ug/Kg		94	48 - 148
Benzo[b]fluoranthene	1000	987		ug/Kg		98	66 - 136
Benzo[k]fluoranthene	1010	933		ug/Kg		93	63 - 143
bis (2-chloroisopropyl) ether	993	733		ug/Kg		74	44 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*99*		*36 - 145*
Phenol-d5	*94*		*38 - 149*
Nitrobenzene-d5	*90*		*38 - 141*
2-Fluorobiphenyl	*83*		*42 - 140*
2,4,6-Tribromophenol	*83*		*28 - 143*
Terphenyl-d14	*92*		*42 - 151*

Lab Sample ID: LCSD 580-146384/3-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146384

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	999	1130		ug/Kg		113	66 - 126	1	26
Bis(2-chloroethyl)ether	998	906		ug/Kg		91	57 - 122	4	60
2-Chlorophenol	1000	1190		ug/Kg		119	65 - 125	2	27
1,3-Dichlorobenzene	1000	953		ug/Kg		95	64 - 124	1	60
1,4-Dichlorobenzene	1010	956		ug/Kg		94	62 - 132	0	32
Benzyl alcohol	997	868		ug/Kg		87	42 - 147	2	60
1,2-Dichlorobenzene	1010	930		ug/Kg		92	68 - 118	1	60
2-Methylphenol	997	976		ug/Kg		98	56 - 121	4	25
3 & 4 Methylphenol	1000	1060		ug/Kg		106	61 - 126	0	27
N-Nitrosodi-n-propylamine	1000	962		ug/Kg		96	52 - 127	1	28
Hexachloroethane	1010	951		ug/Kg		94	56 - 131	3	60
Nitrobenzene	1020	1070		ug/Kg		105	59 - 134	6	60
Isophorone	988	1100		ug/Kg		111	53 - 118	1	60
2-Nitrophenol	1010	1260		ug/Kg		125	58 - 128	5	60
2,4-Dimethylphenol	1010	1450	*	ug/Kg		144	58 - 133	1	60
Benzoic acid	5090	5060		ug/Kg		99	10 - 130	4	60
Bis(2-chloroethoxy)methane	998	936		ug/Kg		94	63 - 128	2	60
2,4-Dichlorophenol	1020	1250		ug/Kg		123	59 - 124	4	60
1,2,4-Trichlorobenzene	1000	932		ug/Kg		93	63 - 128	3	28
Naphthalene	1010	905		ug/Kg		90	64 - 129	2	26
4-Chloroaniline	983	353		ug/Kg		36	20 - 181	24	60
Hexachlorobutadiene	1000	941		ug/Kg		94	59 - 134	4	60
4-Chloro-3-methylphenol	1010	1130		ug/Kg		112	58 - 128	1	27
2-Methylnaphthalene	991	934		ug/Kg		94	65 - 125	4	27
Hexachlorocyclopentadiene	1000	726		ug/Kg		73	30 - 132	1	60
2,4,6-Trichlorophenol	1010	1000		ug/Kg		99	66 - 131	2	60
2,4,5-Trichlorophenol	1010	941		ug/Kg		93	64 - 124	4	60
2-Chloronaphthalene	1000	923		ug/Kg		92	69 - 129	1	25
2-Nitroaniline	983	873		ug/Kg		89	58 - 133	3	60
Dimethyl phthalate	1000	1040		ug/Kg		104	65 - 125	2	60

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

Lab Sample ID: LCSD 580-146384/3-A
Matrix: Solid
Analysis Batch: 146364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146384

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene			1000	975		ug/Kg		97	69 - 129	1	28
2,6-Dinitrotoluene			1000	957		ug/Kg		96	65 - 125	6	60
3-Nitroaniline			987	442	*	ug/Kg		45	80 - 165	17	60
Acenaphthene			1000	895		ug/Kg		89	65 - 130	2	27
2,4-Dinitrophenol			5060	3870		ug/Kg		77	53 - 168	4	60
4-Nitrophenol			5030	4640		ug/Kg		92	47 - 172	4	33
Dibenzofuran			1010	929		ug/Kg		92	70 - 125	1	60
2,4-Dinitrotoluene			1000	1020		ug/Kg		102	57 - 122	3	31
Diethyl phthalate			1000	968		ug/Kg		97	64 - 129	3	26
4-Chlorophenyl phenyl ether			992	955		ug/Kg		96	65 - 130	2	60
Fluorene			1010	971		ug/Kg		96	68 - 128	3	31
4-Nitroaniline			991	776		ug/Kg		78	70 - 150	6	60
4,6-Dinitro-2-methylphenol			5060	4770		ug/Kg		94	38 - 143	3	60
N-Nitrosodiphenylamine			1000	1040		ug/Kg		104	88 - 153	3	60
4-Bromophenyl phenyl ether			1000	931		ug/Kg		93	64 - 134	2	60
Hexachlorobenzene			1000	922		ug/Kg		92	61 - 136	0	60
Pentachlorophenol			1000	1030		ug/Kg		102	29 - 124	3	68
Phenanthrene			1000	836		ug/Kg		84	65 - 125	1	28
Anthracene			1010	913		ug/Kg		91	73 - 123	1	27
Di-n-butyl phthalate			1000	958		ug/Kg		96	69 - 124	1	60
Fluoranthene			1000	933		ug/Kg		93	61 - 121	2	36
Pyrene			998	909		ug/Kg		91	54 - 134	1	31
Butyl benzyl phthalate			1000	951		ug/Kg		95	65 - 140	0	60
3,3'-Dichlorobenzidine			1980	1140	*	ug/Kg		57	73 - 163	8	60
Benzo[a]anthracene			1000	896		ug/Kg		89	64 - 124	1	27
Chrysene			992	855		ug/Kg		86	71 - 126	1	26
Bis(2-ethylhexyl) phthalate			1000	983		ug/Kg		98	64 - 144	2	60
Di-n-octyl phthalate			1010	912		ug/Kg		91	58 - 148	1	31
Benzo[a]pyrene			1000	913		ug/Kg		91	68 - 128	2	30
Indeno[1,2,3-cd]pyrene			998	851		ug/Kg		85	59 - 139	2	29
Dibenz(a,h)anthracene			1000	944		ug/Kg		94	57 - 142	1	30
Benzo[g,h,i]perylene			1010	1050		ug/Kg		104	57 - 142	1	28
Carbazole			1010	927		ug/Kg		92	88 - 158	0	60
1-Methylnaphthalene			997	964		ug/Kg		97	48 - 148	2	30
Benzo[b]fluoranthene			1000	984		ug/Kg		98	66 - 136	0	31
Benzo[k]fluoranthene			1010	915		ug/Kg		91	63 - 143	2	31
bis (2-chloroisopropyl) ether			993	730		ug/Kg		73	44 - 140	0	60

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*97*		*36 - 145*
Phenol-d5	*94*		*38 - 149*
Nitrobenzene-d5	*92*		*38 - 141*
2-Fluorobiphenyl	*83*		*42 - 140*
2,4,6-Tribromophenol	*83*		*28 - 143*
Terphenyl-d14	*93*		*42 - 151*

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

Lab Sample ID: MB 580-145951/1-A
Matrix: Solid
Analysis Batch: 146122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.010		mg/Kg		09/27/13 05:44	09/30/13 17:31	1
PCB-1221	ND		0.011		mg/Kg		09/27/13 05:44	09/30/13 17:31	1
PCB-1232	ND		0.011		mg/Kg		09/27/13 05:44	09/30/13 17:31	1
PCB-1242	ND		0.010		mg/Kg		09/27/13 05:44	09/30/13 17:31	1
PCB-1248	ND		0.010		mg/Kg		09/27/13 05:44	09/30/13 17:31	1
PCB-1254	ND		0.010		mg/Kg		09/27/13 05:44	09/30/13 17:31	1
PCB-1260	ND		0.010		mg/Kg		09/27/13 05:44	09/30/13 17:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*104*	^	*45 - 135*	*09/27/13 05:44*	*09/30/13 17:31*	*1*
DCB Decachlorobiphenyl	*121*		*50 - 140*	*09/27/13 05:44*	*09/30/13 17:31*	*1*

Lab Sample ID: LCS 580-145951/2-A
Matrix: Solid
Analysis Batch: 146122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145951

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.100	0.116		mg/Kg		116	40 - 140		
PCB-1260			0.100	0.127		mg/Kg		127	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*108*	^	*45 - 135*
DCB Decachlorobiphenyl	*122*		*50 - 140*

Lab Sample ID: LCSD 580-145951/3-A
Matrix: Solid
Analysis Batch: 146122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			0.100	0.104		mg/Kg		104	40 - 140	11	20
PCB-1260			0.100	0.102	*	mg/Kg		102	60 - 130	22	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*102*	^	*45 - 135*
DCB Decachlorobiphenyl	*103*		*50 - 140*

Lab Sample ID: 580-40501-1 MS
Matrix: Solid
Analysis Batch: 146122

Client Sample ID: WFE-SP1A-092013
Prep Type: Total/NA
Prep Batch: 145951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		0.103	0.112		mg/Kg	☼	109	40 - 140		
PCB-1260	ND	*	0.103	0.100		mg/Kg	☼	97	60 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*	^	*45 - 135*
DCB Decachlorobiphenyl	*91*		*50 - 140*

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

Lab Sample ID: 580-40501-1 MSD
Matrix: Solid
Analysis Batch: 146122

Client Sample ID: WFE-SP1A-092013
Prep Type: Total/NA
Prep Batch: 145951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.111	0.122		mg/Kg	☼	110	40 - 140	9	20
PCB-1260	ND	*	0.111	0.131	F	mg/Kg	☼	118	60 - 130	27	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*	^	*45 - 135*
DCB Decachlorobiphenyl	*109*		*50 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-147082/1-B
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 147132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.060		mg/L		10/13/13 12:36	10/14/13 08:32	1
Barium	ND		0.010		mg/L		10/13/13 12:36	10/14/13 08:32	1
Cadmium	ND		0.010		mg/L		10/13/13 12:36	10/14/13 08:32	1
Chromium	ND		0.025		mg/L		10/13/13 12:36	10/14/13 08:32	1
Lead	ND		0.030		mg/L		10/13/13 12:36	10/14/13 08:32	1
Selenium	ND		0.10		mg/L		10/13/13 12:36	10/14/13 08:32	1
Silver	ND		0.050		mg/L		10/13/13 12:36	10/14/13 08:32	1

Lab Sample ID: LCS 580-147082/2-B
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 147132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	3.82		mg/L		96	80 - 120
Barium	4.00	3.71		mg/L		93	80 - 120
Cadmium	0.100	0.0928		mg/L		93	80 - 120
Chromium	0.400	0.361		mg/L		90	80 - 120
Lead	1.00	0.927		mg/L		93	80 - 120
Selenium	4.00	3.98		mg/L		100	80 - 120
Silver	0.600	0.552		mg/L		92	80 - 120

Lab Sample ID: LCSD 580-147082/3-B
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: Lab Control Sample Dup
Prep Type: TCLP
Prep Batch: 147132

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	3.95		mg/L		99	80 - 120	3	20
Barium	4.00	3.78		mg/L		94	80 - 120	2	20
Cadmium	0.100	0.0969		mg/L		97	80 - 120	4	20
Chromium	0.400	0.379		mg/L		95	80 - 120	5	20
Lead	1.00	0.971		mg/L		97	80 - 120	5	20
Selenium	4.00	4.14		mg/L		103	80 - 120	4	20
Silver	0.600	0.567		mg/L		94	80 - 120	3	20

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

Lab Sample ID: 580-40501-6 MS
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: WFE-SP6A-092013
Prep Type: TCLP
Prep Batch: 147132

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		4.00	4.02		mg/L		100	50 - 150
Barium	0.40		4.00	4.19		mg/L		95	50 - 150
Cadmium	0.012		0.100	0.104		mg/L		92	50 - 150
Chromium	ND		0.400	0.374		mg/L		94	50 - 150
Lead	0.93		1.00	1.84		mg/L		90	50 - 150
Selenium	ND		4.00	4.22		mg/L		106	50 - 150
Silver	ND		0.600	0.559		mg/L		93	50 - 150

Lab Sample ID: 580-40501-6 MSD
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: WFE-SP6A-092013
Prep Type: TCLP
Prep Batch: 147132

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		4.00	4.18		mg/L		104	50 - 150	4	20
Barium	0.40		4.00	4.37		mg/L		99	50 - 150	4	20
Cadmium	0.012		0.100	0.110		mg/L		98	50 - 150	5	20
Chromium	ND		0.400	0.390		mg/L		97	50 - 150	4	20
Lead	0.93		1.00	1.92		mg/L		99	50 - 150	4	20
Selenium	ND		4.00	4.36		mg/L		109	50 - 150	3	20
Silver	ND		0.600	0.591		mg/L		99	50 - 150	6	20

Lab Sample ID: 580-40501-6 DU
Matrix: Solid
Analysis Batch: 147176

Client Sample ID: WFE-SP6A-092013
Prep Type: TCLP
Prep Batch: 147132

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND		ND		mg/L		NC	20
Barium	0.40		0.377		mg/L		6	20
Cadmium	0.012		0.0115		mg/L		5	20
Chromium	ND		ND		mg/L		NC	20
Lead	0.93		0.895		mg/L		4	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-147133/14-A
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 147133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		10/13/13 12:45	10/14/13 08:08	1

Lab Sample ID: LCS 580-147133/15-A
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 147133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0200	0.0231		mg/L		115	80 - 120

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

Lab Sample ID: LCSD 580-147133/16-A
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 147133

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.0200	0.0232		mg/L		116	80 - 120	0	20

Lab Sample ID: 580-40501-6 MS
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: WFE-SP6A-092013
Prep Type: TCLP
Prep Batch: 147133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.0200	0.0198		mg/L		96	80 - 120		

Lab Sample ID: 580-40501-6 MSD
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: WFE-SP6A-092013
Prep Type: TCLP
Prep Batch: 147133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0200	0.0195		mg/L		94	80 - 120	2	20

Lab Sample ID: 580-40501-6 DU
Matrix: Solid
Analysis Batch: 147171

Client Sample ID: WFE-SP6A-092013
Prep Type: TCLP
Prep Batch: 147133

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/L		NC	20

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP1A-092013

Lab Sample ID: 580-40501-1

Date Collected: 09/20/13 16:30

Matrix: Solid

Date Received: 09/24/13 09:45

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			146490	09/26/13 15:21	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146517	10/03/13 19:37	MMH	TAL SEA
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		1	146440	10/03/13 16:06	EKK	TAL SEA
Total/NA	Prep	3550B			145951	09/27/13 05:44	SGH	TAL SEA
Total/NA	Analysis	8082		1	146122	09/30/13 19:20	SGH	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:25	FCW	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:33	PAB	TAL SEA
TCLP	Analysis	6010B		1	147176	10/14/13 09:08	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145993	09/27/13 11:47	JJP	TAL SEA

Client Sample ID: WFE-SP2A-092013

Lab Sample ID: 580-40501-2

Date Collected: 09/20/13 16:40

Matrix: Solid

Date Received: 09/24/13 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	5035			146490	09/26/13 15:24	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146517	10/03/13 19:58	MMH	TAL SEA
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		5	146440	10/03/13 16:30	EKK	TAL SEA
Total/NA	Analysis	8082		1	146122	09/30/13 20:39	SGH	TAL SEA
Total/NA	Prep	3550B			145951	09/27/13 05:44	SGH	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:28	FCW	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:33	PAB	TAL SEA
TCLP	Analysis	6010B		1	147176	10/14/13 09:11	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145993	09/27/13 11:47	JJP	TAL SEA

Client Sample ID: WFE-SP3A-092013

Lab Sample ID: 580-40501-3

Date Collected: 09/20/13 16:50

Matrix: Solid

Date Received: 09/24/13 09:45

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			146490	09/26/13 15:27	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146517	10/03/13 20:19	MMH	TAL SEA
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		5	146440	10/03/13 16:54	EKK	TAL SEA
Total/NA	Prep	3550B			145951	09/27/13 05:44	SGH	TAL SEA

Client Sample ID: WFE-SP3A-092013

Lab Sample ID: 580-40501-3

Date Collected: 09/20/13 16:50

Matrix: Solid

Date Received: 09/24/13 09:45

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	146122	09/30/13 20:53	SGH	TAL SEA
TCLP	Leach	1311			147100	10/12/13 11:22	RBD	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:30	FCW	TAL SEA
TCLP	Leach	1311			147100	10/12/13 11:22	RBD	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:33	PAB	TAL SEA
TCLP	Analysis	6010B		1	147176	10/14/13 09:15	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145993	09/27/13 11:47	JJP	TAL SEA

Client Sample ID: WFE-SP4A-092013

Lab Sample ID: 580-40501-4

Date Collected: 09/20/13 17:00

Matrix: Solid

Date Received: 09/24/13 09:45

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			146490	09/26/13 15:29	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146517	10/03/13 20:40	MMH	TAL SEA
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		5	146440	10/03/13 17:18	EKK	TAL SEA
Total/NA	Prep	3550B			145951	09/27/13 05:44	SGH	TAL SEA
Total/NA	Analysis	8082		1	146122	09/30/13 21:08	SGH	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:37	FCW	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:33	PAB	TAL SEA
TCLP	Analysis	6010B		1	147176	10/14/13 09:19	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145993	09/27/13 11:47	JJP	TAL SEA

Client Sample ID: WFE-SP5A-092013

Lab Sample ID: 580-40501-5

Date Collected: 09/20/13 17:15

Matrix: Solid

Date Received: 09/24/13 09:45

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			146490	09/26/13 15:30	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146517	10/03/13 21:01	MMH	TAL SEA
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		5	146440	10/03/13 17:42	EKK	TAL SEA
Total/NA	Prep	3550B			145951	09/27/13 05:44	SGH	TAL SEA
Total/NA	Analysis	8082		1	146122	09/30/13 21:22	SGH	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:40	FCW	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:33	PAB	TAL SEA

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: Parkwater

TestAmerica Job ID: 580-40501-1

Client Sample ID: WFE-SP5A-092013

Lab Sample ID: 580-40501-5

Date Collected: 09/20/13 17:15

Matrix: Solid

Date Received: 09/24/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6010B		1	147176	10/14/13 09:22	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145993	09/27/13 11:47	JJP	TAL SEA

Client Sample ID: WFE-SP6A-092013

Lab Sample ID: 580-40501-6

Date Collected: 09/20/13 17:30

Matrix: Solid

Date Received: 09/24/13 09:45

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			146490	09/26/13 15:32	MMH	TAL SEA
Total/NA	Analysis	8260B		1	146517	10/03/13 21:23	MMH	TAL SEA
Total/NA	Prep	3550B			146384	10/02/13 13:15	RBD	TAL SEA
Total/NA	Analysis	8270C		5	146440	10/03/13 18:06	EKK	TAL SEA
Total/NA	Analysis	8082		1	146122	09/30/13 21:36	SGH	TAL SEA
Total/NA	Prep	3550B			145951	09/27/13 05:44	SGH	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	7470A			147133	10/13/13 12:45	PAB	TAL SEA
TCLP	Analysis	7470A		1	147171	10/14/13 08:15	FCW	TAL SEA
TCLP	Leach	1311			147082	10/11/13 14:35	ALC	TAL SEA
TCLP	Prep	3010A			147132	10/13/13 12:33	PAB	TAL SEA
TCLP	Analysis	6010B		1	147176	10/14/13 08:44	HJM	TAL SEA
Total/NA	Analysis	D 2216		1	145993	09/27/13 11:47	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

TestAmerica Job ID: 580-40501-1

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: 580-40501-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40501-1	WFE-SP1A-092013	Solid	09/20/13 16:30	09/24/13 09:45
580-40501-2	WFE-SP2A-092013	Solid	09/20/13 16:40	09/24/13 09:45
580-40501-3	WFE-SP3A-092013	Solid	09/20/13 16:50	09/24/13 09:45
580-40501-4	WFE-SP4A-092013	Solid	09/20/13 17:00	09/24/13 09:45
580-40501-5	WFE-SP5A-092013	Solid	09/20/13 17:15	09/24/13 09:45
580-40501-6	WFE-SP6A-092013	Solid	09/20/13 17:30	09/24/13 09:45

BNSF RAILWAY — CHAIN OF CUSTODY

LAB WORK ORDER: 40501

LABORATORY INFORMATION

Laboratory: TESTI AMERICA
Project Manager: KRIS ALLEN
Address: 5755 8TH STREET EAST
Phone: 253-922-2310
City/State/ZIP: TACOMA, WA 98424
Fax:

SHIPMENT INFORMATION

Shipment Method:
Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 139611O.04
Project State of Origin: WA
Project City: SPOKANE
BNSF Project Name: PARKWATER
BNSF Contact: BRUCE SHEPPARD
BNSF Work Order No.: TTD101-N10

CONSULTANT INFORMATION

Company: KENNEDY/JENKS CONSULTANTS
Project Number: 139611O.04
Project Manager: HOWARD YOUNG
Address: 32001 32ND AVE S, SUITE 100
Email: howard.young@kennedyjenks.com
City/State/ZIP: FEDERAL WAY WA 98001
Phone: 253-835-6400
Fax: 253-952-3435

TURNAROUND TIME

- [ ] 1-day Rush
- [ ] 5- to 8-day Rush
- [ ] 2-day Rush
- [ ] Standard 10-Day
- [x] 3-day Rush
- [ ] Other

DELIVERABLES

- [x] BNSF Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [x] Other Deliverables? W/ EDD CUSTOM
- [x] EDD Req, Format? EIM

METHODS FOR ANALYSIS

TCLP METALS (AS, BA, CD, CR, PB, SE, AG) (1311/6020)
SEMI VOLATILE ORGANICS FULL LIST (8270)
PCBs (8082)
VOCs FULL LIST (8260)

580-40501 Chain of Custody

SAMPLE INFORMATION

	Sample Identification	Containers	Sample Collection Date	Time	Sampler	Filtered Y/N	Type (Comp/Grab)	Matrix	TCLP METALS	SEMI VOLATILE ORGANICS FULL LIST (8270)	PCBs (8082)	VOCs FULL LIST (8260)	COMMENTS	LAB USE
1	WFE-SP1A-092013	2	9/20/13	16:30	HY	NA	C	S	X	X	X		COMPOSITED IN FIELD	1
2	~~WFE-SP1B-092013~~	1	~~9/20/13~~	~~16:30~~	~~HY~~	~~NA~~	~~G~~	S				X	HY 9/23	
3	WFE-SP2A-092013	2	9/20/13	16:40	HY	NA	C	S	X	X	X		COMPOSITED IN FIELD	2
4	~~WFE-SP2B-092013~~	1	~~9/20/13~~	~~16:40~~	~~HY~~	~~NA~~	~~G~~	S				X	HY 9/23	
5	WFE-SP3A-092013	2	9/20/13	16:50	HY	NA	C	S	X	X	X		COMPOSITED IN FIELD	3
6	~~WFE-SP3B-092013~~	1	~~9/20/13~~	~~16:50~~	~~HY~~	~~NA~~	~~G~~	S				X	HY 9/23	
7	WFE-SP4A-092013	2	9/2013	17:00	HY	NA	C	S	X	X	X		COMPOSITED IN FIELD	4
8	~~WFE-SP4B-092013~~	1	~~9/20/13~~	~~17:00~~	~~HY~~	~~NA~~	~~G~~	S				X	HY 9/23	
9	WFE-SP5A-092013	2	9/20/13	17:15	HY	NA	C	S	X	X	X		COMPOSITED IN FIELD	5
10	~~WFE-SP5B-092013~~	1	~~9/20/13~~	~~17:15~~	~~HY~~	~~NA~~	~~G~~	S				X	HY 9/23	
11	WFE-SP6A-092013	2	9/20/13	17:30	HY	NA	C	S	X	X	X		COMPOSITED IN FIELD	6
12	~~WFE-SP6B-092013~~	1	~~9/20/13~~	~~17:30~~	~~HY~~	~~NA~~	~~G~~	S				X	HY 9/23	
13														
14														
15														

Cooler/TB Dig/IR cor 6.1 unc 6.0
Cooler Dsc Lg Blue Wh @ Lab
Wet/Packs Packing BUBBLE
w/COC FED EX P.O.

Relinquished By:	Date/Time: 9/23/13 1555	Received By:	Date/Time: 9/23/13 16:00	Cor
Relinquished By: Cat Stapleton	Date/Time: 9/23/13 16:00	Received By:	Date/Time: 9/24/13 9:45	
Relinquished By:	Date/Time:	Received By:	Date/Time:	
Received by Laboratory:	Date/Time:	Lab Remarks:	Lab: Custody Intact? ☐ Yes ☐ No	Custody Seal No. / BNSF COC No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES — DUPLICATE - CONSULTANT — TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 580-40501-1

Login Number: 40501

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	Discrepancy in listed analysis.
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.	False	Improper containers received.
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	

Appendix D

Photographic Logs

APPENDIX D - 1

SITE PHOTOGRAPHS

Materials Storage Building

East Excavation

Parkwater Rail Yard Site

Photograph 1- East excavation area prior to field activities. Track removal has occurred – Looking to northeast.

10/02/2013

Photograph 2 – Soil excavation - Looking to northeast.

10/07/2013

APPENDIX D - 1

SITE PHOTOGRAPHS

Materials Storage Building

East Excavation

Parkwater Rail Yard Site

Photograph 3 – Soil excavation - Looking to northeast.

10/10/2013

Photograph 4 – Backfill- Looking to northeast.

10/14/2013

APPENDIX D - 1

SITE PHOTOGRAPHS

Materials Storage Building

East Excavation

Parkwater Rail Yard Site

Photograph 5- Ballast and track replacement - Looking to west.

11/25/2013

APPENDIX D - 1

SITE PHOTOGRAPHS

Materials Storage Building

West Excavation

Parkwater Rail Yard Site

Photograph 1- West excavation area prior to field activities. Track removal has occurred - Looking to northeast.

11/18/2014

Photograph 2 – Soil excavation (west half excavation) - Looking to north.

11/19/2014

APPENDIX D - 1

SITE PHOTOGRAPHS

Materials Storage Building

West Excavation

Parkwater Rail Yard Site

Photograph 3 – Soil excavation (west half excavation) - Looking to west.

11/19/2014

Photograph 4 – Soil excavation (west half excavation) - Looking to west.

11/20/2014

APPENDIX D - 1

SITE PHOTOGRAPHS

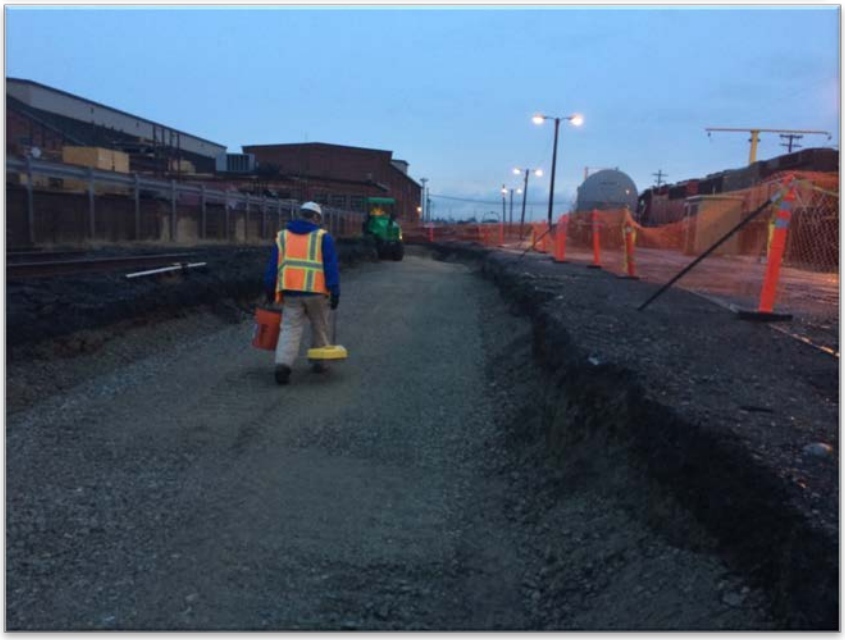
Materials Storage Building

West Excavation

Parkwater Rail Yard Site

Photograph 5- Backfilling and compaction - Looking to southwest.

12/11/2014



Photograph 6 – Backfilling, compaction, and compaction testing - Looking to east.

12/12/2014

APPENDIX D - 2

SITE PHOTOGRAPHS

Western Fruit Express

Parkwater Rail Yard Site

Photograph 1- Initial soil excavation - Looking to west.

9/19/2013

Photograph 2 – Initial soil excavation - Looking to west.

9/19/2013

APPENDIX D - 2

SITE PHOTOGRAPHS

Western Fruit Express

Parkwater Rail Yard Site

Photograph 3 – Over excavation - Looking to west.

9/25/2013

Photograph 4 – Over excavation - Looking to east.

9/25/2013

APPENDIX D - 2

SITE PHOTOGRAPHS

Western Fruit Express

Parkwater Rail Yard Site

Photograph 5- Over excavation - Looking to west.

9/26/2013

Photograph 6 – Over excavation at WFE-BS21-092513- Looking to southwest.

10/02/2013

APPENDIX D - 2

SITE PHOTOGRAPHS

Western Fruit Express

Parkwater Rail Yard Site

Photograph 7- Over excavation on west end - Looking to southwest.

10/03/2013

Photograph 8 – Over excavation on south side - Looking to east.

10/03/2013

APPENDIX D - 2

SITE PHOTOGRAPHS

Western Fruit Express

Parkwater Rail Yard Site

Photograph 9- Geotextile placement and CSTC cap - Looking to west.

10/09/2013

Photograph 10 – Compacted CSTC cap - Looking to west.

10/10/2013

APPENDIX D - 3

SITE PHOTOGRAPHS

Dismantling Spur

Parkwater Rail Yard Site

Photograph 1- Soil excavation control points - Looking to east.

9/18/2013

Photograph 2 – Initial soil excavation - Looking to west.

9/18/2013

APPENDIX D - 3

SITE PHOTOGRAPHS

Dismantling Spur

Parkwater Rail Yard Site

Photograph 3 – Over excavation- Looking to southeast.

9/24/2013

Photograph 4 – Over excavation - Looking to east.

10/1/2013

APPENDIX D - 3

SITE PHOTOGRAPHS

Dismantling Spur

Parkwater Rail Yard Site

Photograph 5- Over excavation - Looking to southwest.

10/1/2013

Photograph 6 –Backfill and capping- Looking to southwest.

10/31/2013

APPENDIX D - 4

SITE PHOTOGRAPHS

Yardley Office (Main Line No. 1)

Parkwater Rail Yard Site

Photograph 1- Undercutter- Looking to north.

10/08/2013

Photograph 2 – Undercutter - Looking to west.

10/08/2013

APPENDIX D - 4

SITE PHOTOGRAPHS

Yardley Office (Main Line No. 1)

Parkwater Rail Yard Site

Photograph 3 – Undercutter - Looking to northwest.

10/08/2013

Photograph 4 – Undercutter - Looking to east.

10/9/2013

APPENDIX D - 4

SITE PHOTOGRAPHS

Yardley Office (Main Line No. 1)

Parkwater Rail Yard Site

Photograph 5- Undercutter - Looking to west.

10/09/2013

Photograph 6 – Backfilled - Looking to northeast.

10/09/2013

APPENDIX D - 5

SITE PHOTOGRAPHS

Ralston Lead Track Area

Parkwater Rail Yard Site

Photograph 1- Control Point Layout - Looking to east.

9/11/2013

Photograph 2 – Soil excavation (east excavation) - Looking to west.

9/17/2013

APPENDIX D - 5

SITE PHOTOGRAPHS

Ralston Lead Track Area

Parkwater Rail Yard Site

Photograph 3 – Soil excavation (east excavation) - Looking at north sidewall.

9/17/2013

Photograph 4 – Soil excavation (east excavation) - Looking to west.

9/17/2013

APPENDIX D - 5

SITE PHOTOGRAPHS

Ralston Lead Track Area

Parkwater Rail Yard Site

Photograph 5- Soil excavations - Looking to west.

9/17/2013

Photograph 6 – Backfilling and compaction of east excavation - Looking to west.

9/18/2013

APPENDIX D - 5

SITE PHOTOGRAPHS

Ralston Lead Track Area

Parkwater Rail Yard Site

Photograph 7- Compaction of east excavation - Looking to east.

9/18/2013

Photograph 8 – West excavation - Looking to west.

9/18/2013

APPENDIX D - 5

SITE PHOTOGRAPHS

Ralston Lead Track Area

Parkwater Rail Yard Site

Photograph 9- Backfilling and compaction of west excavation - Looking to west.

9/18/2013

Photograph 10- Placement of geotextile and CSTC - Looking to west.

9/24/2013

APPENDIX D - 5

SITE PHOTOGRAPHS

Ralston Lead Track Area

Parkwater Rail Yard Site

Photograph 11- Compacted CSTC (east excavation) - Looking to east.

9/24/2013

Photograph 12- Compacted CSTC (west excavation) - Looking to west.

9/24/2013

APPENDIX D - 6

SITE PHOTOGRAPHS

Former Koch Asphalt Lease Area

Parkwater Rail Yard Site

Photograph 1- Preconstruction activities- Looking to east.

9/06/2013

Photograph 2 – Berm construction for spoils stockpile.

9/17/2013

APPENDIX D - 6

SITE PHOTOGRAPHS

Former Koch Asphalt Lease Area

Parkwater Rail Yard Site

Photograph 3 – Soil excavation at GTP-48 & 50.

9/23/2013

Photograph 4 – Backfilling soil excavation at GTP-48 & 50.

9/30/2013

APPENDIX D - 6

SITE PHOTOGRAPHS

Former Koch Asphalt Lease Area

Parkwater Rail Yard Site

Photograph 5- Covered stockpiles.

10/31/2013

Photograph 6 – Covered stockpiles.

11/27/2013

APPENDIX D - 6

SITE PHOTOGRAPHS

Former Koch Asphalt Lease Area

Parkwater Rail Yard Site

Photograph 7 – Initial grading activities - Looking to north.

2/3/2015

Photograph 8 – Geotextile placement activities – Looking to east.

2/11/2015

APPENDIX D - 6

SITE PHOTOGRAPHS

Former Koch Asphalt Lease Area

Parkwater Rail Yard Site

Photograph 9- Placement of CSTC cap - Looking to northeast.

2/11/2015

Photograph 10 – Completed cap – Looking to west.

2/13/2015

APPENDIX D - 7

SITE PHOTOGRAPHS

East and West Debris/Soil Disposal Area

Parkwater Rail Yard Site

Photograph 1- Preconstruction activities - Looking to east.

09/30/2013

Photograph 2 –Preconstruction activities - Looking to west.

09/30/2013

APPENDIX D - 7

SITE PHOTOGRAPHS

East and West Debris/Soil Disposal Area

Parkwater Rail Yard Site

Photograph 3 – Materials storage building (east excavation) stockpile - Looking to north.

10/09/2013

Photograph 4 –Rough grading and removal of large concrete debris.

10/15/2013

APPENDIX D - 7

SITE PHOTOGRAPHS

East and West Debris/Soil Disposal Area

Parkwater Rail Yard Site

Photograph 5- Over excavation at location GTP-36B.

10/17/2013

Photograph 6- Installing geo-textile fabric and cap material – Looking to west.

10/21/2013

APPENDIX D - 7

SITE PHOTOGRAPHS

East and West Debris/Soil Disposal Area

Parkwater Rail Yard Site

Photograph 7- Installing geo-textile fabric and cap material – Looking to west.

10/22/2013

Photograph 8- Cap installed – Looking to east.

10/31/2013

APPENDIX D - 7

SITE PHOTOGRAPHS

East and West Debris/Soil Disposal Area

Parkwater Rail Yard Site

Photograph 9- Fencing – Looking to east.

11/27/2013

Photograph 10- Fencing – Looking to east.

11/27/2013

APPENDIX D - 8

SITE PHOTOGRAPHS

Diesel Shop Area

Parkwater Rail Yard Site

Photograph 1-
Preconstruction activities - Looking to northeast.

09/06/2013

Photograph 2 – Preparing for concrete activities (east end) - Looking to northeast.

09/30/2013

APPENDIX D - 8

SITE PHOTOGRAPHS

Diesel Shop Area

Parkwater Rail Yard Site

Photograph 3 – Subgrade - Looking to southwest.

10/10/2013

Photograph 4 – Grading and compacting structural backfill - Looking to northeast.

10/15/2013

APPENDIX D - 8

SITE PHOTOGRAPHS

Diesel Shop Area

Parkwater Rail Yard Site

Photograph 5- Concrete placement (east end) - Looking to northeast.

10/22/2013

Photograph 6 – Concrete (east end) - Looking to northeast.

10/22/2013

APPENDIX D - 8

SITE PHOTOGRAPHS

Diesel Shop Area

Parkwater Rail Yard Site

Photograph 7- Asphalt - Looking to northeast.

10/31/2013

Photograph 8 – Asphalt - Looking to northeast.

10/31/2013

Appendix E

Soil Compaction and Materials Testing Reports

ALLWEST
Testing & Engineering

REPORT TRANSMITTAL

ATTENTION: Jesse Henderson

COMPANY: Strider Construction

PROJECT NAME: Parkwater Rail Yard

PROJECT LOCATION: 5324 E. Trent **PROJECT #:** 213-198T

FROM: Jackie Silbernagel

DATE	DESCRIPTION
10/22/2013	Daily Field Reports

CC:

INCLUDES:

Daily Field Report #8

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Clear
Permit #	-----	Date:	10/14/2013
Page	1 of 2		
Report#	8	Sheet#	17553
Technician:	D.S. Mills		
Type of Testing / Inspection:	Soils Density Testing		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:		of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor to perform density tests on area A-1. This was a retest from 10/10/13. Density test results appear to be in general conformance with project requirement of 95% of the modified Proctor value. See density sheet for test results and locations.

Representative: D. Scott Mills	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment					
SFD			2.0	12	X	Nuke		Coring Machine		Generator
						Other Type:				Quantity

Field Samples Obtained

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ALLWEST
Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 8 Sheet # 17553 Page 2 of 2

Project Name:	Parkwater Rail Yard			Project No.:	213-198T
Date:	10/14/2013	Weather:	Clear	Test Method:	ASTM D 6938
Location:	5324 East Trent, City of Spokane Valley			Technician:	D.S. Mills
Contractor:	Strider Construction Co., Inc.				

Proctor Number		Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-456	3/4" minus reject	8.1	139.1	Modified
2					
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	Area 1 east end	-1'	1	8"	8.1	133.5	96	95%	
2	Area 1 middle	-1'	1	8"	7.3	132.3	95	95%	
3	Area 1 west end	-1'	1	8"	7.6	133.7	96	95%	

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ALLWEST
Testing & Engineering

REPORT TRANSMITTAL

ATTENTION: Jesse Henderson

COMPANY: Strider Construction

PROJECT NAME: Parkwater Rail Yard

PROJECT LOCATION: 5324 E. Trent **PROJECT #:** 213-198T

FROM: Jackie Silbernagel

DATE	DESCRIPTION
9/25/2013	Daily Field Reports

CC:

INCLUDES:

Daily Field Reports #1-2

If you need additional assistance, please contact us at jsilbernagel@allwesttesting.com or (509) 534-4411.

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Dark
Permit #	-----	Date:	9/12/2013
Page	1 of 1		
Report#	1	Sheet#	17244
Technician:	T. Schroeder		
Type of Testing / Inspection:	Soil Sample Pick-Up		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	Kent of	Strider Constrution Co., Inc.	

Narrative:

ALLWEST arrived on site as requested by Strider Construction to sample Central Pre-Mix crushed surfacing top course for Proctor. ALLWEST sampled onsite stockpile as directed by Kent and returned to laboratory for testing.

Representative: Tyson Schroeder	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment
SSP			2.0	12	Nuke / Coring Machine / Generator
					Other Type: / Quantity

Field Samples Obtained

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ALLWEST Testing & Engineering
DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Partly cloudy
Permit #	-----	Date:	9/18/2013
Page	1 of 2		
Report#	2	Sheet#	17349
Technician:	D.S. Mills		
Type of Testing / Inspection:	Soils Density Testing		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	Kent	of	Strider Constrution Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor to perform density test on backfill. Contractor placed select fill in 6" lifts and compacted with a single drum roller. Density tests were performed at -3' 5", -18" and -6" for area 5 hole #1, hole #2 depth was -3.5' and 1.5'.

Density test results appear to be in general conformance with project specifications. See density sheet for test results and locations.

Representative: D. Scott Mills	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment					
SFD			6.0	12	X	Nuke		Coring Machine		Generator
						Other Type:				Quantity

Field Samples Obtained

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ALLWEST
Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 2 Sheet # 17349 Page 2 of 2

Project Name:	Parkwater Rail Yard			Project No.:	213-198T
Date:	9/18/2013	Weather:	Partly cloudy	Test Method:	ASTM D 6938
Location:	Parkwater Rail Yard			Technician:	D.S. Mills
Contractor:	Strider Constrution Co., Inc.				

Proctor Number		Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus	7.8	141.4	Modified
2					
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	Area 5 hole #1	-3' 5"	1	8"	6.4	136.4	96	95%	
2	Area 5 hole #1	-18"	1	8"	6.9	137.6	97	95%	
3	Area 5 hole #1	-6"	1	8"	6.7	135.3	96	95%	
4	Area 5 hole #2	-3.5'	1	8"	6.9	135.1	96	95%	
5	Area 5 hole #2	-1.5'	1	8"	6.7	135.2	96	95%	

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ALLWEST
Testing & Engineering

REPORT TRANSMITTAL

ATTENTION: Jesse Henderson

COMPANY: Strider Construction

PROJECT NAME: Parkwater Rail Yard

PROJECT LOCATION: 5324 E. Trent **PROJECT #:** 213-198T

FROM: Jackie Silbernagel

DATE	DESCRIPTION
10/3/2013	Daily Field Reports

CC:

INCLUDES:

Daily Field Report #3

If you need additional assistance, please contact us at jsilbernagel@allwesttesting.com or (509) 534-4411.

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Sunny
Permit #	-----	Date:	9/27/2013
Page	1 of 2		
Report#	3	Sheet#	10756
Technician:	N. White		
Type of Testing / Inspection:	Soils Density Testing		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	Kent and Ty	of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor to perform density tests on GTP backfill locations. One thin lift was placed on GTP 46, 47, 48, 49, 50, 51 and 58. After testing at 6" and 4" depths, ALLWEST found the gauge was reading the underlying material therefore backscatter test mode was used to read the thin lift. After testing each location, one additional 6" lift was placed on GTP 51. ALLWEST performed an 8" probe depth for this elevation. Eight tests performed on this visit appear to be in general conformance with project requirements.

Representative: Noah White	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment				
ST COMPT	7:30	10:30	3.0	12	X	Nuke		Coring Machine	Generator
						Other Type:			Quantity

Field Samples Obtained

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ALLWEST
Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 3 Sheet # 10756 Page 2 of 2

Project Name:	Parkwater Rail Yard			Project No.:	213-198T
Date:	9/27/2013	Weather:	Sunny	Test Method:	ASTM D 6938
Location:	GTP backfill			Technician:	N. White
Contractor:	Strider Construction Co., Inc.				

	Proctor Number	Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus reject	7.8	141.4	D1557
2					
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	GTP 51	-1 1/2'	1	8"	6.2	133.9	95	95%	
2	GTP 49	-1 1/2'	1	8"	6.7	134.6	95	95%	
3	GTP 47	-1 1/2'	1	8"	6.4	134.3	95	95%	
4	GTP 46	-1 1/2'	1	8"	5.9	134.7	95	95%	
5	GTP 48	-1 1/2'	1	8"	6.3	134.2	95	95%	
6	GTP 50	-1 1/2'	1	8"	6.5	134.0	95	95%	
7	GTP 58	-1 1/2'	1	8"	6.6	134.8	95	95%	
8	GPP 51	-1'	1	8"	5.5	135.7	96	95%	

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ALLWEST
Testing & Engineering

REPORT TRANSMITTAL

ATTENTION: Jesse Henderson

COMPANY: Strider Construction

PROJECT NAME: Parkwater Rail Yard

PROJECT LOCATION: 5324 E. Trent **PROJECT #:** 213-198T

FROM: Jackie Silbernagel

DATE	DESCRIPTION
10/15/2013	Daily Field Reports and Laboratory Test Results

CC:

INCLUDES:

Daily Field Reports #4-7
Soil Test Results #S213-456

If you need additional assistance, please contact us at jsilbernagel@allwesttesting.com or (509) 534-4411.

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Partly cloudy, very windy
Permit #	-----	Date:	9/30/2013
Page	1 of 2		
Report#	4	Sheet#	17383
Technician:	M. Cunningham		
Type of Testing / Inspection:	Soils Density Testing - backfill		
Deficiencies Noted:		NO	X YES If yes, explain below
Reported To:	Kent of Strider Construction Co., Inc.		

Narrative:

ALLWEST arrived on site as requested by the contractor to test density of replacement fill material placed and compacted at various locations.

Density test results at areas GTP 47 and GTP 46 appeared to be in general conformance with project requirements.

Density test results at area 8 diesel shop did not meet requirements and will be moisture conditioned and re-compacted.

See "Field Density Test Report" for further details.

Representative: Mike Cunningham	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment
SFD	12:30	2:30	2.0	12	X Nuke ☐ Coring Machine ☐ Generator
					Other Type: ☐ Quantity

Field Samples Obtained

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ALLWEST
Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 4 Sheet # 17383 Page 2 of 2

Project Name: Parkwater Rail Yard		Project No.: 213-198T	
Date: 9/30/2013	Weather: Partly cloudy, very windy	Test Method: ASTM D 6938	Gauge: CPN 5209
Location: 5324 East Trent, Spokane		Technician: M. Cunningham	M.S.: 35593
Contractor: Strider Construction Co., Inc.			D.S.: 8150

	Proctor Number	Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus reject	7.8	141.4	Modified C
2	S213-414	Crushed surfacing top course	9.4	141.2	Modified C
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	Excavation GTP 47	-0.5'	1	8"	7.8	128.7	91	95%	
2	Excavation GTP 47	-0.5'	1	8"	8.0	135.2	96	95%	#1
3	Excavation GTP 46	-0.5'	1	8"	7.1	135.7	96	95%	
4	Excavation area 8 diesel shop	Subgrade	2	8"	5.0	114.7	81	95%	
5	Excavation area 8 diesel shop	Subgrade	2	8"	5.0	114.5	81	95%	
6	Excavation area 8 diesel shop	Subgrade	2	8"	4.9	113.7	81	95%	

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Clear
Permit #	-----	Date:	10/2/2013
Page	1 of 2		
Report#	5	Sheet#	16808
Technician:	T. Schroeder		
Type of Testing / Inspection:	Soils Density Testing		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	Jessie Anderson	of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site to retest failed area 8 on report #4 dated 9/30/13 and test density of area 2 Western Fruit Express. Density tests performed in both areas appeared to be in general conformance with project specifications. See "Field Density Test Report" for test results and locations.

Representative: Tyson Schroeder	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment					
SFD			2.0	12	X	Nuke		Coring Machine		Generator
						Other Type:				Quantity

Field Samples Obtained

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ALLWEST
Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 5 Sheet # 16808 Page 2 of 2

Project Name: Parkwater Rail Yard		Project No.: 213-198T	
Date: 10/2/2013	Weather: Clear	Test Method: ASTM D 6938	Gauge: 2262
Location: Area 2 and area 8		Technician: T. Schroeder	M.S.: ---
Contractor: Strider Construction Co., Inc.			D.S.: ---

	Proctor Number	Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus reject	7.8	141.4	Modified
2	S213-414	Crushed surfacing top course - Perry pit	9.4	141.2	Modified
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	Area 2 southwest corner	Finish grade	1	8"	9.4	135.3	96	95%	
2	Area 2 northwest corner	Finish grade	1	8"	8.3	134.0	95	95%	
3	Area 2 southeast corner	Finish grade	1	8"	8.7	134.9	95	95%	
4	Area 2 northeast corner	Finish grade	1	10"	8.9	135.7	96	95%	
5	Area 8 east side of tank 6	Finish grade	2	4"	5.2	133.8	95	95%	Report #4 Test #4
6	Area 8 west side of tank 6	Finish grade	2	4"	4.1	134.5	95	95%	Report #4 Test #6

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Cloudy
Permit #	-----	Date:	10/8/2013
Page	1 of 2		
Report#	6	Sheet#	17572
Technician:	M. Cunningham		
Type of Testing / Inspection:	Soils Density Testing - backfill		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:		of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor to test densities of backfill at selected locations by nuclear densometer.

Subgrade tests at area #2 Western Fruit Express appeared to be in general conformance with project requirements after re-compaction of the east end.

One test conducted on crushed surfacing top course placed over geofabric for informational purposes indicated low moisture content.

Tests conducted at Area #3, dismantling spur, appeared to be in general conformance with project requirements. See "Field Density Test Report" for further details.

Representative: Mike Cunningham	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment					
SFD	4:00	6:30	2.0	12	X	Nuke		Coring Machine		Generator
						Other Type:				Quantity

Field Samples Obtained

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Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 6 Sheet # 17572 Page 2 of 2

Project Name: Parkwater Rail Yard		Project No.: 213-198T	
Date: 10/8/2013	Weather: Cloudy	Test Method: ASTM D 6938	Gauge: CPN 8424
Location: 5324 East Trent, City of Spokane Valley		Technician: M. Cunningham	M.S.: 42141
Contractor: Strider Construction Co., Inc.			D.S.: 9175

	Proctor Number	Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus reject	7.8	141.4	Modified
2	S213-414	Crushed surfacing top course - Perry pit	9.4	141.2	Modified
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	Area #2 Western Fruit Express, east to west	Subgrade	1	6"	9.5	132.4	94	95%	
2	Area #2 Western Fruit Express, east to west	Subgrade	1	6"	9.3	133.7	95	95%	
3	Area #2 Western Fruit Express, east to west	Subgrade	1	8"	9.2	134.0	95	95%	
4	Area #2 Western Fruit Express, east to west	Subgrade	1	6"	9.3	133.7	95	95%	
5	Area #2 Western Fruit Express	Subgrade	1	6"	8.8	135.3	96	95%	#1
6	Crushed surfacing top course over geofabric for information only	CSTC	2	BS	4.5	123.5	87	95%	
7	Area #3 dismantling spur	CSTC	2	BS	4.4	139.3	99	95%	
8	Area #3 dismantling spur	CSTC	2	BS	4.4	135.7	96	95%	

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ALLWEST Testing & Engineering

DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Cloudy
Permit #	-----	Date:	10/10/2013
Page	1 of 2		
Report#	7	Sheet#	17569
Technician:	M. Cunningham		
Type of Testing / Inspection:	Soils Density Testing - excavation backfill		
Deficiencies Noted:		NO	X YES If yes, explain below
Reported To:		of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor to test density of excavation backfill at locations selected by the contractor.

Tests by nuclear densometer at area A-1 approximately 4 feet below subgrade produced results not meeting requirements. Moisture readings at these locations were 11.4% and 11.5%, significantly greater than optimum moisture content of 7.8%. Test results conducted at area #3, Western Fruit Express, on 6" of crushed surfacing top course over geofabric appeared to be in general conformance with project requirements.

ALLWEST returned to area A-1 to test ¾" minus reject material transported to the excavation from a drier part of the stockpile.

Satisfactory density test results could still not be achieved.

The contractor requested a soil sample be collected form the dry portion of the stockpile for an updated Proctor value.

See "Field Density Test Report" for further details.

Representative: Mike Cunningham	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment					
SFD	11:00		3.5	12	X	Nuke		Coring Machine		Generator
SSP		3:30	1.0			Other Type:				Quantity

Field Samples Obtained

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Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 7 Sheet # 17569 Page 2 of 2

Project Name:	Parkwater Rail Yard			Project No.:	213-198T
Date:	10/10/2013	Weather:	Cloudy	Test Method:	ASTM D 6938
Location:	5324 East Trent, City of Spokane Valley			Technician:	M. Cunningham
Contractor:	Strider Construction Co., Inc.				

	Proctor Number	Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus reject	7.8	141.4	Modified
2	S213-414	Crushed surfacing top course - Perry pit	9.4	141.2	Modified
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	Area #A-1 east	-4'	1	8"	11.4	131.0	93	95%	
2	Area #A-1 west	-4'	1	8"	11.5	131.4	93	95%	
3	Area #3, Western Fruit Express, crushed surfacing top course over geofabric, northwest corner	+.5'	2	BS	6.1	132.9	94	95%	
4	Area #3, Western Fruit Express, crushed surfacing top course over geofabric, west side center	+.5'	2	BS	7.6	137.7	98	95%	
5	Area #3, Western Fruit Express, crushed surfacing top course over geofabric, east side center	+.5'	2	BS	7.2	136.5	97	95%	
6	Area #3, Western Fruit Express, crushed surfacing top course over geofabric, north side 1/3, east to west	+.5'	2	BS	6.1	135.9	96	95%	
7	Area #3, Western Fruit Express, crushed surfacing top course over geofabric, northwest corner	+.5'	2	BS	6.5	141.7	100	95%	#3
8	Area #A-1 northeast	-3'	1	8"	6.7	129.9	92	95%	
9	Area #A-1 southwest	-3'	1	8"	7.5	126.5	89	95%	
10	Area #A-1 west	-2.5'	1	8"	7.3	126.3	89	95%	
11	Area #A-1 east	-2.5'	1	8"	7.5	127.6	90	95%	
12	Area #A-1 east, static rolled	-2.5'	1	8"	8.6	125.9	89	95%	#11

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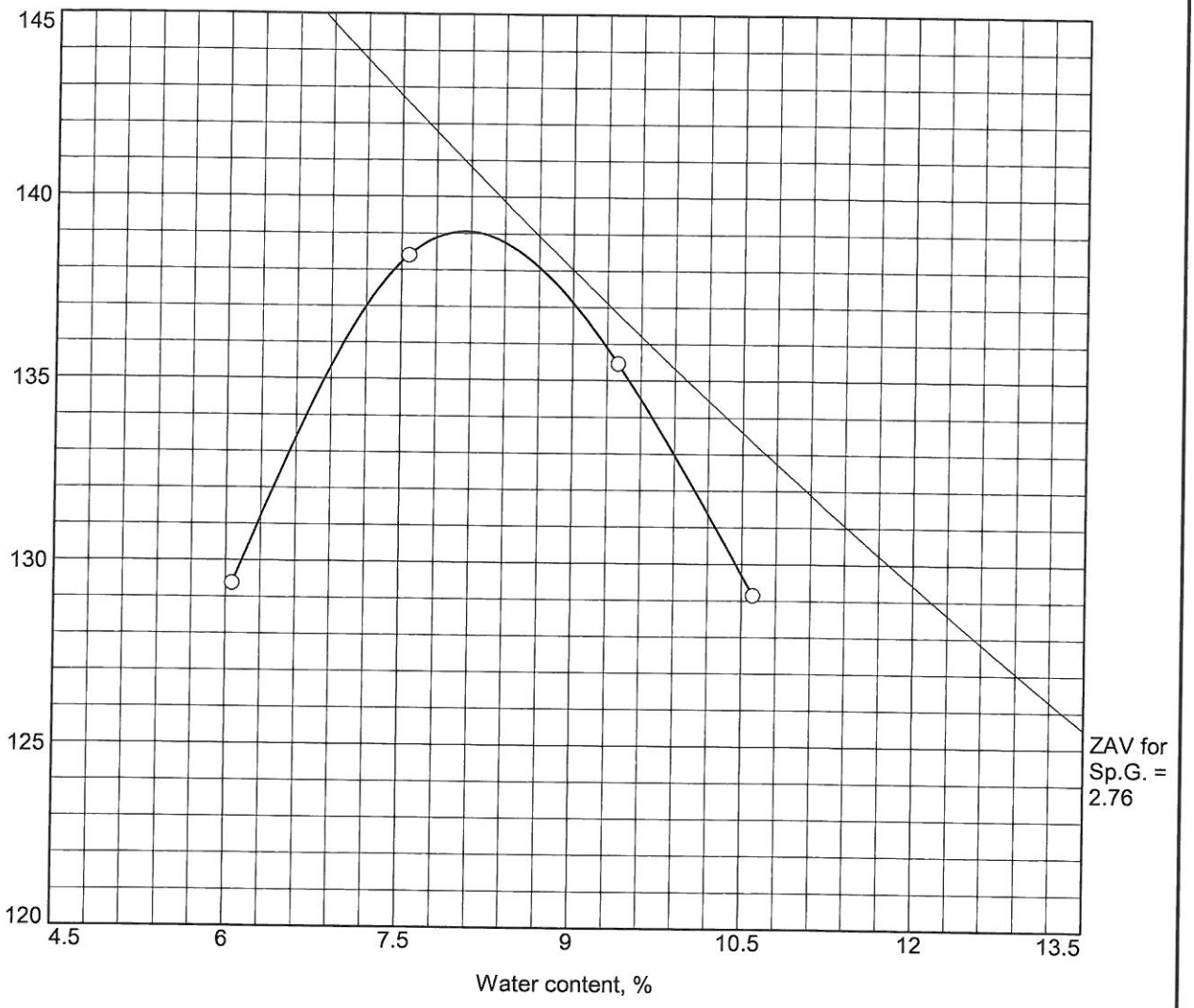
Moisture Density Curve



Test specification: ASTM D 1557-07 Method C Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
stockpile							0	

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 139.1 pcf Optimum moisture = 8.1 %	3/4" Minus (Reject)

Project No. 213-198T **Client:** Strider
Project: Park Water Rail yard

○ **Location:** On-site stockpile **Sample Number:** S213-456

ALLWEST TESTING & ENGINEERING, LLC

Spokane, WA

Remarks:
M.Cunningham sampled 10-10-13

Reviewed by: TS

Tested By: D.Schmitz **Checked By:** C.Warrick

ALLWEST
Testing & Engineering

REPORT TRANSMITTAL

ATTENTION: Jesse Henderson

COMPANY: Strider Construction

PROJECT NAME: Parkwater Rail Yard

PROJECT LOCATION: 5324 E. Trent **PROJECT #:** 213-198T

FROM: Jackie Silbernagel

DATE	DESCRIPTION
11/8/2013	Daily Field Reports and Laboratory Test Results

CC:

INCLUDES:

Daily Field Reports #9-11
Concrete Test Results: 7 Day Break #C213-428

If you need additional assistance, please contact us at jsilbernagel@allwesttesting.com or (509) 534-4411.

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DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Clear
Permit #	-----	Date:	10/22/2013
Page	1 of 1		
Report#	9	Sheet#	17684
Technician:	C. Warrick		
Type of Testing / Inspection:	Concrete		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	Jesse	of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor and observed that wire mesh was in place for an approximately 11 yard concrete placement for the area #8 diesel shop. Concrete was pumped into slab and wire mesh centered manually. Jesse from Strider Construction was okay with this placement procedure. He acknowledged that the use of dobies or spacers would be ideal, however contractor did not have enough onsite. Concrete was tested for slump, air, temperature and five test cylinders cast, the results are as follows.

Slump	6.5" following Super-P
Air content	5%
Temperature of mix	64°F
Air temperature	65°F

Representative: Cole Warrick	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: TS

Codes	Project Times Begin	End	Hours	Miles	Equipment
SIC	1:00	4:00	3.0	12	Nuke / Coring Machine / Generator
					Other Type: / Quantity

Field Samples Obtained

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DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Fog
Permit #	-----	Date:	10/23/2013
Page	1 of 1		
Report#	10	Sheet#	17706
Technician:	D.S. Mills		
Type of Testing / Inspection:	Concrete Sample Pick-Up		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	---	of	---

Narrative:

ALLWEST arrived on site to pick up concrete test cylinders cast on 10/22/13 and transport them to ALLWEST Spokane laboratory.

Cylinders appeared to be undisturbed.

Representative: D. Scott Mills	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: B

Codes	Project Times Begin	End	Hours	Miles	Equipment
CSP			2.0	12	Nuke / Coring Machine / Generator
					Other Type: / Quantity

Field Samples Obtained

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DAILY PROJECT FIELD REPORT

Project:	Parkwater Rail Yard	Project #:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Weather:	Overcast, fog
Permit #	-----	Date:	10/24/2013
Page	1 of 2		
Report#	11	Sheet#	17683
Technician:	D.S. Mills		
Type of Testing / Inspection:	Soils Density Testing		
Deficiencies Noted:	X NO		YES If yes, explain below
Reported To:	---	of	Strider Construction Co., Inc.

Narrative:

ALLWEST arrived on site as requested by the contractor to perform density tests on area A-7 cap. 6 inches of ¾ inch minus reject was placed over geofabric. Density test results appear to be in general conformance with project specifications. See density sheet for test results and locations.

Representative: D. Scott Mills	Received By:
This report shall be considered preliminary until reviewed and countersigned by the ALLWEST Project Manager	Reviewed By: B

Codes	Project Times Begin	End	Hours	Miles	Equipment					
SFD			2.0	12	X	Nuke		Coring Machine		Generator
						Other Type:				Quantity

Field Samples Obtained

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Testing & Engineering

Field Density Test Report for Soils

ASTM 6938

Report # 11 Sheet # 17683 Page 2 of 2

Project Name: Parkwater Rail Yard		Project No.: 213-198T	
Date: 10/24/2013	Weather: Overcast, fog	Test Method: ASTM D 6938	Gauge: 5577
Location: Area A-7		Technician: D.S. Mills	M.S.: 9271
Contractor: Strider Construction Co., Inc.			D.S.: 35250

	Proctor Number	Soil Description	Optimum Moisture	Maximum Density	Standard/Modified
1	S213-413	3/4" minus reject	7.8	141.4	Modified
2					
3					

Test Number	Test Location	Elevation	Proctor Number	Probe Depth	% Moisture	Dry Density	% Compaction	Required Compaction	Re-Test of Test No.
1	East end	+6"	1	BS	4.6	137.5	97	95%	
2	Middle	+6"	1	BS	4.6	134.3	95	95%	
3	West end	+6"	1	BS	4.9	136.1	96	95%	

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Daily Field Report # 9

Concrete Test Cylinder Report
ASTM C 31, AASTHO T 23, C 138, T 121, C 143, T 119, C 172, T 141 , C 231, T 152, C 1064, T 309

Project Name:	Parkwater Rail Yard	Project No:	213-198T
Project Address:	5324 East Trent, Spokane Valley, WA	Permit #:	-----
Client Name, Address:	Strider Constrution Co., Inc.		

CONCRETE MIX INFORMATION

Concrete Supplier:	Central Pre-Mix	Specified Slump (in):	4" maximum prior to Super-P
Concrete Mix No.:	314066	Specified Air Content (%):	6% ± 1.5%
Admixtures:	Daravair	Required Strength at 28 days (psi):	4,000
Add Water (gal):	Rinse	Sacks / yd^3:	6

TEST INFORMATION

Structure Type & Placement Location: Area #8 - diesel shop

Sample Location: Approximately 10' east, 5' north of southwest corner of palcement

Cast By: C. Warrick

Initial Cure Box Temperature (°F):	64°	Minimum Temperature (°F):	---	Maximum Temperature (°F):	---
Initial Field Cure Temperature (°F):	---	Minimum Temperature (°F):	---	Maximum Temperature (°F):	---
Slump (in):	6.5" after Super-P	Truck Number:	125	Cast Date:	10/22/2013
Air Content (%):	5.0%	Ticket Number:	165422	Date Lab Rcv'd:	10/23/2013
Concrete Temp (°F):	64°	Batch Time:	1:21 PM	Weather:	Clear
Air Temp (°F):	63°	Sample Time:	2:05 PM	yd^3 Sampled:	6.5
Unit Weight (lbs/ft):	---	Yield:	---	yd^3 Placed:	11

LABORATORY INFORMATION

ASTM C39, AASHTO T 22 Field Set No.:

Lab ID No.		Test Age (Days)	Test Date	Cylinder Diameter (in)	Area (in^2)	Total Load (lbs)	Compressive Strength (PSI)	Fracture Type
C213-428		7	10/29/13	4.01	12.63	61,565	4,870	2
C213-428		28	11/19/13					
C213-428		28	11/19/13					
C213-428		28	11/19/13					
C213-428		H						

Cap Type Used: **ASTM C 617, AASHTO T 231, or C 1231**

Reviewed By: TS

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SPECIAL INSPECTION REPORT - EARTHWORK

GEOENGINEERS

Form Revision	11/20/2013

523 East 2nd Ave., Spokane, WA 99202
(509) 363-3125 . Fax (509) 363-3126

DISTRIBUTION

PROJECT: BNSF / Parkwater Remediation

GEI PROJECT NO.: 0506-117-23 | REPORT NO:

Date: 12-12-14 | PAGE: 1 of 3

GEI Personnel on site: Doug Hehr

Time on site: 900 | Time off site: 1000

Site Address: | Jurisdiction: | Permit:

Architect/Engineer of record: | Plan Version Date:

Other guidance documents:

General Contractor: Sandry Construction | Superintendent: Chris Smith

Specialty Contractor: Kennedy Jenks Consultants | Foreman: Andrew Kearney

Environmental Conditions: Overcast 45°

Observations:

I performed multiple site visits to conduct in ~~place~~ place density testing on imported 2½" minus back fill material. This material was placed in a trench along the north side of the fueling platform to replace contaminated material removed earlier. 6 in place tests were performed using a Troxler 3440 series nuclear densometer at a probe depth of four inches. Results indicate that the materials in the area tested appear to conform to the required minimum compaction according to project specifications. See density test sheet for results and drawing for approximate locations.

* Second site visit from 1515 to 1615.

Observations, tests and any non-conforming items reported to: Chris Smith / Andrew Kearney

Attachments (if any):

Based on the ~~tests~~ and/or observations described in this report, the work we observed generally:

- [x] CONFORMS
- [ ] CONFORMS EXCEPT AS NOTED
- [ ] DOES NOT CONFORM
- [ ] CORRECTS PREVIOUS DEFICIENCY REPORT DATED
- [ ] REINSPECTION REQUIRED

to noted project plans and specifications, and relevant code provisions. NOTE: This is a preliminary document until reviewed and signed by GeoEngineers' technical representative.

[x] PRELIMINARY [ ] FINAL

Report Prepared By — Date: 12-12-14

Technical Reviewer — Date

TEST NO.	TEST TYPE*	TEST LOCATION	ELEV	PROCTOR I.D. NO.	USCS	IMPORTED Y/N	EQUIP. TYPE	WET DENS. (test pcf)	% FIELD MOIST.	DRY DENS. (test pcf)	MAX. DENS. (Proctor)	R**	CALC. % COMP.	SPEC % COMP.	P/F
1	A4	Trench Backfill/See drawing	SG-4'	M14-0155	CSBC 2½"	Y	VSDR	139.4	2.6	135.9	143.0	Y	95	95	P
2								139.2	2.5	136.3			95		P
3								140.4	2.2	137.3			96		P
4			SG-2'					141.0	1.9	138.5			97		P
5								138.6	1.7	136.2			95		P
6								138.3	2.2	135.3			95		P

*TEST TYPE: A = direct transmission + depth B = backscatter **R = rock correction applied

Standard Count: Wet/MS 523 xi/% -.6 H_2O/DS 1775 xi/% .8

Field Test Method:	Maximum Density Method:
ASTM D6938	☐ AASHTO T 99, ASTM D 698 (Standard Proctor) ☒ AASHTO T 180, ASTM D1557 (Modified Proctor)

Nuclear Gauge Make/Model: Troxler 3440

Nuclear Gauge Serial No: 14722

Density bias (ref. block): _____ Moisture bias (oven): _____

USCS Material Visual Classification (ASTM D2488)				Compaction Equipment:	
GW	well graded gravel	GP	poorly graded gravel	(V)SDR	(Vibratory) Smooth Drum Roller
SW	well graded sand	SP	poorly graded sand	(V)SFR	(Vibratory) Sheepsfoot Roller
GM	silty gravel	SM	silty sand	RP	Reciprocating Plate
ML	nonplastic silt	MH	plastic silt	VP	Vibratory Plate
CL	lean clay	CH	fat clay	LV	Loaded Vehicle
GC	clayey gravel	SC	clayey sand	PR	Pneumatic (rubber tire) Roller
GW-GM	well graded gravel with silt	CSBC	crushed base course	GR	Grid Roller
GP-GM	poorly graded gravel with silt	CSTC	crushed top course	HP	Hoe-Pac
SW-SM	well graded sand with silt	ACP	asphalt concrete pavement	CW	Compaction Wheel

Notes (fill source, proctor info, observations etc.):

TESTING DATE: 8/20 File Number: 0506-117-22

Project: BNSF/Parkwater Remediation

Project Location:

Earthwork Contractor: Sundby Construction

General Contractor:

Gauge Operator: Doug Hehr Checked By:

NOTE: Refer to daily field report for additional information. Field density test results are only applicable to the immediate area of the test at the time performed, and are not necessarily representative of conditions at other times, elevations or locations or for other materials. This report may not be reproduced, except in full, without written approval of GeoEngineers, Inc.

GeoEngineers
523 E. 2nd. Ave., Spokane, WA 99202
Phone (509) 363-3125 Fax (509) 363-3126

IN-PLACE DENSITY AND WATER CONTENT OF SOIL BY NUCLEAR METHODS

LOCATION SKETCH

GeoEngineers

Form Revision	5/18/2012

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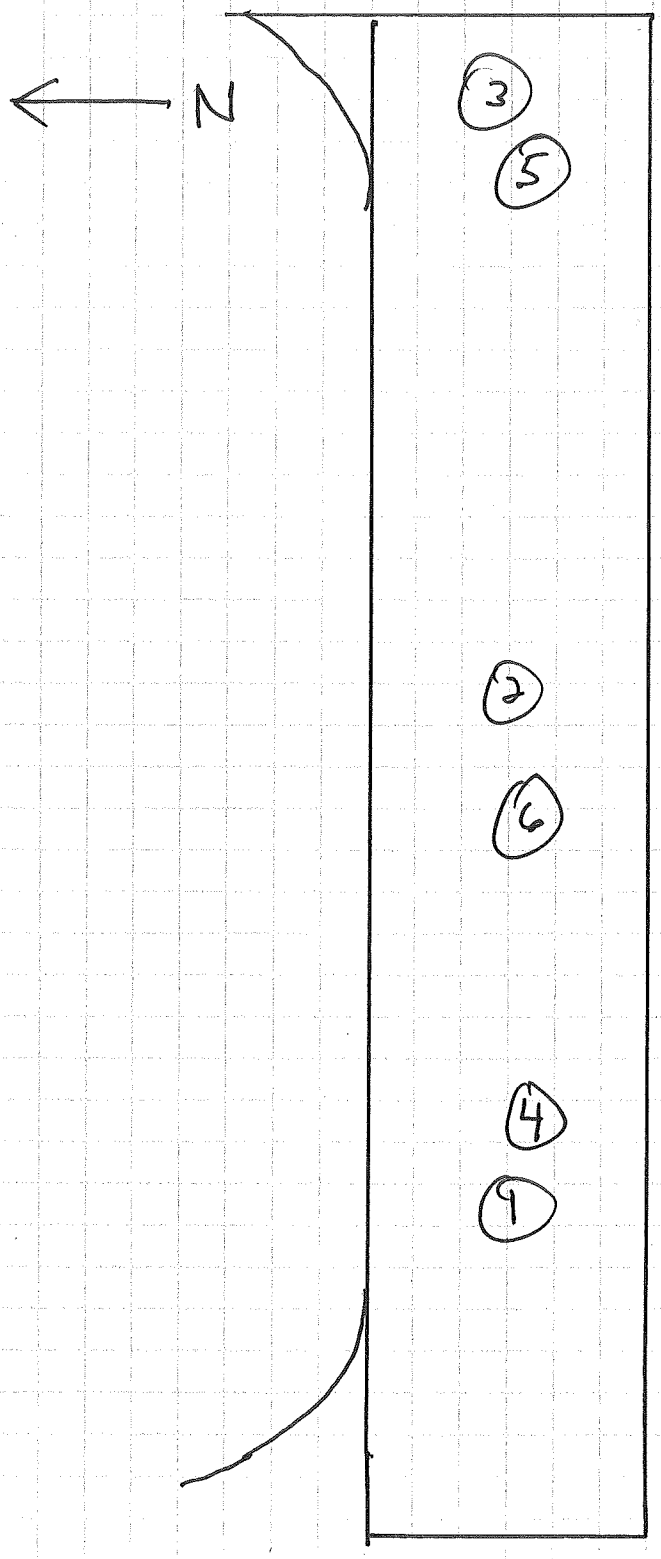
(509) 363-3125 . Fax (509) 363-3126

PROJECT:	BNSF/Parkwater Remediation		
GEI PROJECT NO.:	0506-117-22	REPORT NO:	
Date:	12-12-14	PAGE: 3	3 of 3
TITLE:	Density Test Locations		



Approximate Scale: NTS

LEGEND

① = Test Location