

Former City Hall SARA

Limited Contamination Assessment Report

City of Key West

February 12, 2014



ATKINS

Plan Design Enable

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Introduction

1.1. Introduction

In a December 22, 2010 correspondence, the Florida Department of Environmental Protection (FDEP) requested the City of Key West (City) submit a Site Assessment Report Addendum (SARA) for the (former) City Hall site. Atkins conducted a limited assessment of groundwater conditions in May 2011 collecting representative groundwater samples from five onsite monitoring wells. On behalf of the City, Atkins submitted a report dated September 19, 2011 to FDEP summarizing the findings of the limited assessment. FDEP responded with a correspondence dated November 9, 2011 requesting additional onsite investigations be conducted to better delineate the contamination plume.

Due to anticipated site development activities, the requested additional groundwater contamination investigation activities were not immediately conducted. Since a significant time period had past between sampling events Atkins conducted sampling at all accessible groundwater monitoring wells on December 17, 2013. A summary table and the full laboratory analytical results were provided to the City and to FDEP. Based on the discussions with both the City and FDEP, Atkins is submitting this interim Limited Contamination Site Assessment Report to provide the City with current information on site conditions as it makes management decisions on the property.

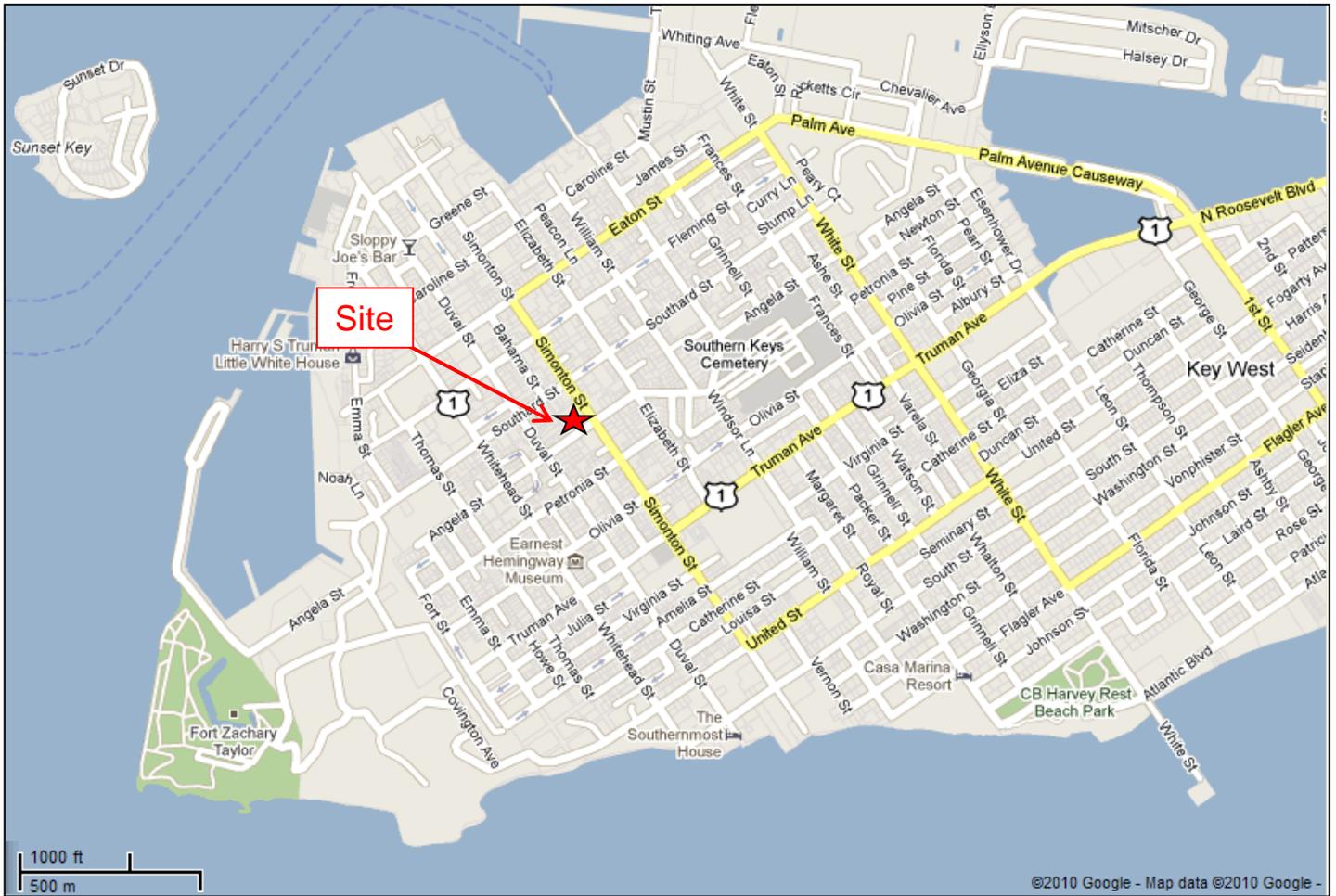
1.2. Project Background

A 550-gallon underground fuel storage tank (UST) was installed at the former Key West City Hall property in 1972 to supply leaded gasoline to City police vehicles. A site location map is provided as Figure 1. This UST was removed in 1992 and one shallow groundwater monitoring well, MW-1, was installed during the tank closure process. Groundwater samples from the well exhibited benzene, total BTEX (benzene, toluene, ethylbenzene and xylenes) and total lead in concentrations exceeding FDEP limits (Chapter 17-770, F.A.C). One double-cased deep well (DW-1), six shallow monitoring wells (MW-2 through MW-7) were installed and 22 soil borings were advanced at the site in 1993. A monitoring well location map is provided as Figure 2. Results of the soil vapor screening revealed excessively contaminated soils in the area to the south of the former UST location. Laboratory analytical results of the groundwater from the seven shallow monitoring wells indicated the presence of benzene concentrations in excess of FDEP limits in the vicinity of the former UST and offsite to the southwest.

In order to determine the horizontal extent of groundwater contamination, five additional shallow monitoring wells were installed at the project site in 1995 (MW-8 through MW-12). Groundwater samples from these monitoring wells were analyzed for volatile organic compounds (VOCs), including methyl tertiary butyl ether (MTBE), via EPA Method 602.

1.3. Historical Monitoring

Eight monitoring events were conducted at the site between January 1996 and July 2003. Generally, decreases in contaminant concentrations were evident in the groundwater samples and the City proposed the initiation of a Monitoring Only Plan (in 1996) and a Natural Attenuation Monitoring Plan (NAMP; in June 2000), both denied by the Department. In November 2000, an addendum to the NAMP was approved and a new monitoring plan implemented. This revised monitoring plan consisted of semi-annual monitoring for two years at MW-10 and MW-2 (BTEX with MTBE analysis) and MW-1, MW-5, MW-6, MW-8, and DW-1 (water levels only). It also required sampling for BTEX with MTBE at the end of the two-year period at monitoring wells MW-1, MW-5, MW-6, MW-8, and DW-1. A table summarizing historical groundwater analytical results is provided in Appendix A.



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City Hall Building
525 Angela Street

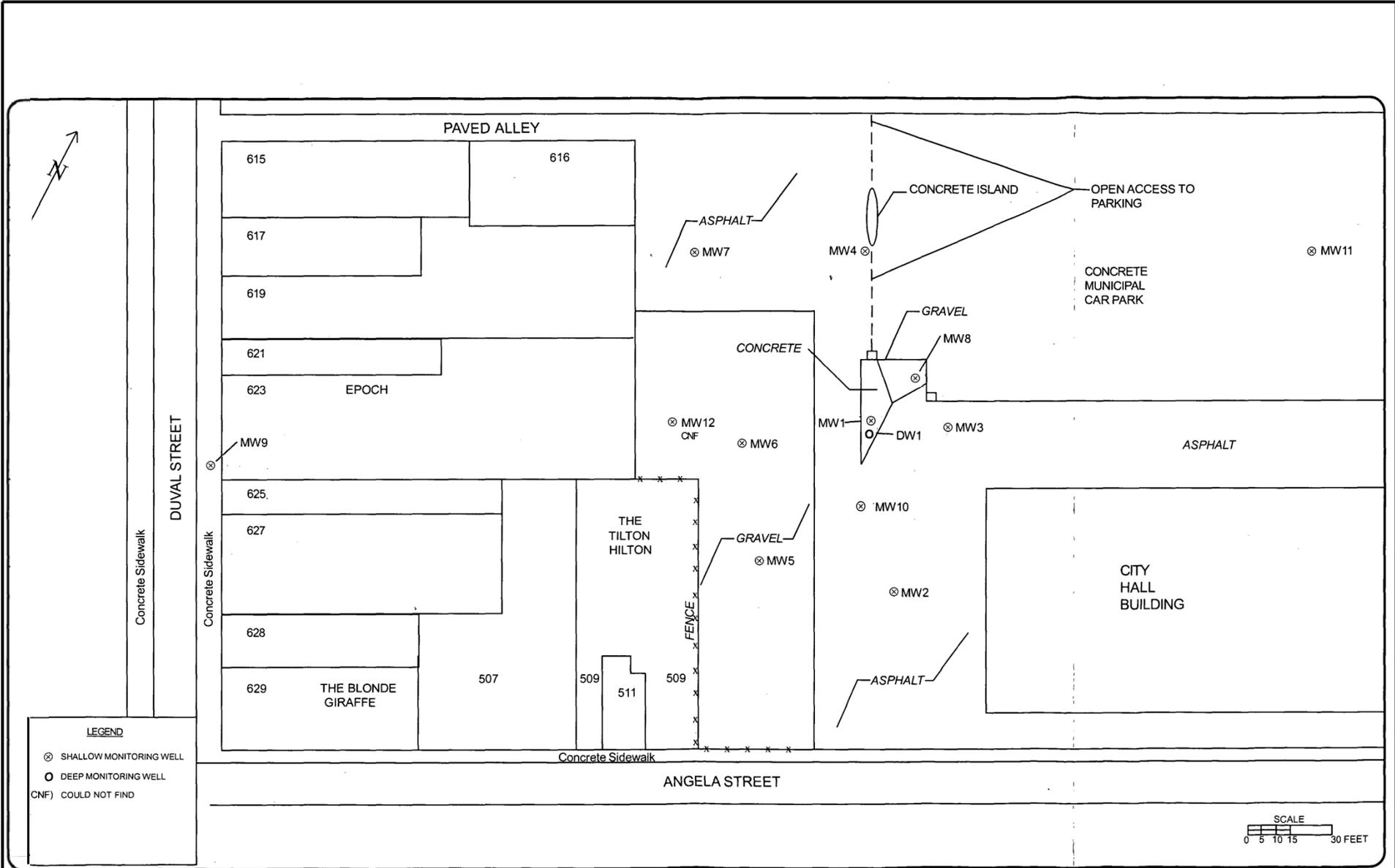
Figure 1

ATKINS 2001 NW 107 AVENUE
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Limited Contamination Site
Assessment Report

Site Location Map



Note: Base map by SWC, Inc



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City Hall Building
525 Angela Street

Figure 2

ATKINS 2001 NW 107 AVENUE
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Limited Contamination Site
Assessment Report

Monitoring Well Location Map

Groundwater Sampling

2.1. 2011 Sampling Activities

Due to the FDEP's concerns and the historical groundwater sampling data available for this project site, Atkins submitted a SARA Sampling Plan (dated April 27, 2011) to the FDEP detailing the proposed additional groundwater sampling to be conducted. FDEP approved this sampling plan in an email correspondence dated April 28, 2011. On May 5, 2011, representative groundwater samples were collected from the SARA Sampling Plan-approved monitoring wells MW-1, MW-2, MW-6, MW-8, and MW-10. All samples were analyzed for volatile organic aromatic (VOC) compounds via EPA Method 8260, which includes the BTEX and MTBE constituents. Though the monitoring wells sampled were part of the monitoring plan approved by the FDEP (NAMP Addendum 2000) they had not been sampled since 2007. Monitoring wells DW-1 and MW-5 were also referenced in the NAMP Addendum. However, DW-1 had not tested above detectable limits for BTEX or MTBE since the monitoring program began in 1996 and MW-5 had not tested above detectable limits for toluene, ethyl-benzene, xylenes or MTBE since 1996 but did contain 8.6 µg/L of benzene in 1996. Monitoring well MW-5 was not included in the 2011 sampling event because BTEX and MTBE had not been reported above detectable levels since 1996. Because monitoring wells MW-9 and MW-11 were found to be partially plugged and were no longer relevant to the petroleum cleanup effort, these wells were abandoned in 2008.

The laboratory analytical results were compared to the applicable FDEP Groundwater Target Cleanup Levels (GCTLs). Table 1 provided in Appendix B summarizes the results of the May 2011 sampling effort. All of the tested parameters for the groundwater sample from MW-2 were either below laboratory detection limits (BDL) or between laboratory method detection limit and the laboratory practical quantitation limit (PQL). Benzene levels in the samples from MW-1 (13 µg/L), MW-8 (12 µg/L), and MW-10 (21 µg/L) exceeded the GCTL of 1 µg/L but below the site-specific natural attenuation default limit of 400 µg/L established in 2000. Isopropylbenzene (cumene) levels in MW-1 (95 µg/L), MW-6 (3.4 µg/L), MW-8 (57 µg/L), and MW-10 (91 µg/L) exceeded the GCTL of 0.8 µg/L. Naphthalene levels in MW-1 (43 µg/L), MW-8 (61 µg/L), and MW-10 (99 µg/L) exceeded the GCTL of 14 µg/L. Total xylenes were detected in the samples from MW-1, MW-8 and MW-10, but at concentrations below the GCTL of 20 µg/L. Additionally, other parameters were detected that do not have a published GCTL (see Table 1).

The May 2011 SARA analytical results indicated that groundwater petroleum contamination was still present in the vicinity of the former tank location. This is consistent with historical sampling results. Comparing the 2011 groundwater testing results with the previous May 2007 results indicated that, with few exceptions, the levels of benzene, toluene, ethylbenzene, and xylenes (BTEX) have decreased substantially. The exceptions include 1) ethylbenzene in MW-6, which increased from BDL to 1.7 µg/L (still below the GCTL), and 2) benzene, toluene, and xylenes in MW-8, which increased to 12 µg/L (GCTL is 10 µg/L), 2.2 µg/L (below the GCTL), and 8.6 µg/L (below the GCTL), respectively.

2.2. 2013 Sampling Activities

2.2.1. Sampling Plan

On December 17, 2013, representative groundwater samples were collected from all accessible onsite and offsite monitoring wells (MW-1, DW-1, MW-2, MW-3, MW-5, MW-6, MW-8, and MW-10). Sampling activities were conducted in accordance with the FDEP Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Copies of the groundwater sampling logs are included in the laboratory analytical report provided as Appendix C. The groundwater samples were submitted to TestAmerica Laboratories, Inc. (Florida Certification No. E81005) for analyses. All samples were analyzed for VOC compounds via EPA Method 8260C, including the BTEX and MTBE constituents, and naphthalene via EPA method 8270D. FDEP only request MW-10 be tested for naphthalene but all wells were tested for this parameter to get groundwater quality information across the site. Prior to conducting the groundwater sampling activities, Atkins submitted a sampling plan to FDEP notifying the agency of the intended field activities.

2.2.2. Analytical Results

Laboratory analytical results were compared to the applicable FDEP GCTLs. The laboratory analytical results report is provided as Attachment C. Table 1 in Appendix B summarizes the results of the recent and May 2011 sampling efforts. All of the tested parameters for the groundwater samples from DW-1, MW-2, MW-5 and MW-6 were either below BDL or between laboratory method detection limit and the laboratory PQL. Benzene levels in the samples from MW-1 (16 µg/L), MW-8 (5.3 µg/L), and MW-10 (22 µg/L) exceeded the GCTL of 1 µg/L but below the site-specific natural attenuation default limit of 400 µg/L

established in 2000. Isopropylbenzene levels in MW-1 (32 µg/L), MW-3 (3.2 µg/L), MW-8 (69 µg/L), and MW-10 (180 µg/L) exceeded the GCTL of 0.8 µg/L. Naphthalene levels in MW-1 (36 µg/L), MW-8 (32 µg/L), and MW-10 (89 µg/L) exceeded the GCTL of 14 µg/L. 1-Methylnaphthalene levels in MW-8 (29 µg/L), and MW-10 (84 µg/L) exceeded the GCTL of 28 µg/L. 2-Methylnaphthalene level in MW-10 (100 µg/L) exceeded the GCTL of 28 µg/L. Total xylene levels detected in the samples from MW-1, MW-3, MW-8 and MW-10, were below the GCTL of 20 µg/L. Additionally, other parameters were detected that did not exceed the established GCTLs or do not have a published GCTL (see Table 1).

Groundwater contamination plume maps for benzene, ethylbenzene, isopropylbenzene, naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene are provided as figures 3 through 8, respectively.



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City Hall Building
525 Angela Street

Figure 3

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December 17, 2013
Benzene Plume Map



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Figure 4

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December 17, 2013
Ethylbenzene Plume Map



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Figure 5

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December 17, 2013
Isopropylbenzene Plume Map



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Figure 6

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December 17, 2013
Naphthalene Plume Map



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Figure 7

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December 17, 2013
1-Methylnaphthalene Plume Map



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Figure 8

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Assessment Report

December 17, 2013
2-Methylnaphthalene Plume Map

Discussion

3.1. Discussion

In a letter dated April 23, 2008, FDEP notified the City that the City Hall site was eligible for the Petroleum Cleanup Protection Program (PCPP). The site was given a priority score rank of 9, which is still well below the current priority score funding threshold for eligible PCPP sites of 46, effective September 20, 2011. With the site already in the PCPP, and it possibly being years before funding would allow the State to proceed with cleanup, the City is not obligated to conduct cleanup activities at this time. However, as part of the PCPP process a limited contamination assessment report (LCAR) sufficient to determine the extent of the contamination and cleanup has to be submitted to FDEP.

Assessment and monitoring activities conducted between 2003 and 2007 provided most of the data needed to delineate contamination at the site. Based on the results of the last round of monitoring data obtained in 2007, a Site Assessment Report Addendum (SARA) was requested by the FDEP and a letter was issued to the City on December 2010 to this effect. Atkins conducted a limited sampling event in 2011 to gain updated information the contamination levels at targeted locations on and off the site. The results of the sampling effort were submitted to FDEP on behalf of the City. FDEP responded to the submission in a correspondence dated November 9, 2011 requiring further investigation be conducted to delineate the contamination plume.

Another reason for continued water quality condition investigations at the site is to address adjacent property owner concerns over possible contamination migrating onto their properties from the City Hall property. If approved by FDEP, the City would like to close offsite monitoring wells, specifically MW-5, MW-6 and MW-7. Atkins sampled all accessible monitoring wells in December 2013 so information on contamination levels at the site would be current. Also, FDEP requires a complete round of sampling be performed to determine the conditions that exist at a site if an extended period of time occurs between sampling events.

The December 2013 analytical data showed that contamination levels at the site appear to be diminishing (see historical analytical results, Table 2), likely due to natural attenuation processes. Although there appears to be a general trending downward of contamination concentrations, levels of benzene, ethylbenzene, isopropylbenzene, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene are still above regulatory GCTLs. These exceedances all occurred at monitoring wells located on the City Hall property. The contamination plume still appears to be located in the vicinity of the source well (MW-1), with a horizontal plume migration beyond MW-8, MW3, and MW-10. There does not appear to be a vertical migration as contaminants have not historically been detected in the deep well (DW-1).

Atkins recommends installing at least two new monitoring wells to better define the contamination plume boundaries for benzene and isopropylbenzene, as requested by FDEP in the November 9, 2011 FDEP letter, and also for naphthalene. One well would be installed easterly of MW-3, and the second westerly of MW-10. See Figure 9 for the approximate locations for the new wells. Note that the third well will not be required if MW-4 can be located and sampled. Information from these wells will better definite the plume boundaries and support closure of the offsite monitoring wells.

The new monitoring wells would be sampled for VOC compounds via EPA Method 8260C, and naphthalene via EPA method 8270D. During this sampling event Atkins also recommends re-sampling MW-5 and MW-6 as FDEP may require confirmation analytical data showing the contamination concentrations in the vicinity of those wells is below GCTLs before approving well closures. FDEP may request a period of monitoring prior to closure; with or without conditions.



Key:
● Proposed Well Location



City of Key West

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Figure 9

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Limited Contamination Site
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Proposed Monitoring Well
Installation Map

Appendices

Appendix A. Historical Analytical Results Table

**Historic Comparison of Groundwater Analytical Results
Former City Hall - Key West, FL**

Well ID	Sample Date	Chloro-benzene	B Benzene	T Toluene	E Ethylbenzene	X Xylenes	Total BTEX	MTBE
Ch. 52-770 Table 5 Groundwater Cleanup Target Levels	N/A	Limit not set	40*	40	30	20	91	50
Ch. 52-770 Table 5 Natural Attenuation Default Limits	N/A	Limit not set	400*	400	300	200	910	500
DW-1	1/16/1996	U	U	U	U	U	U	U
	10/19/1999	U	U	U	U	U	U	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	U	U	U	U	U	U	U
	5/52011	U	NS	NS	NS	NS	NS	NS
	12/17/2013	U	U	U	U	U	U	U
MW-1	1/16/1996	U	147	27.9	406	40	621	U
	10/19/1999	U	91	7.7	96	17	212	2
	10/19/2000	U	U	U	U	U	U	U
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	U	160	10.3	177	31	378.3	U
	5/52011	U	13	2.6	37	9.9	62.5	U
	12/17/2013	U	16	1.6	16	2.3	35.9	U
MW-2	1/16/1996	U	2.6	U	U	U	2.6	U
	10/19/1999	U	5.9	2.1	U	2.2	10.2	U
	10/19/2000	U	U	U	U	U	U	U
	4/16/2001	U	U	U	1.3	6	7.3	U
	10/31/2001	U	U	U	U	U	U	U
	1/11/2002	U	U	U	U	U	U	U
	6/19/2002	NS	U	U	U	U	U	U
	7/11/2003	U	U	U	U	U	U	U
	5/18/2007	U	U	U	1.12	U	1.12	U
	5/52011	U	U	U	U	U	U	U
	12/17/2013	U	U	U	U	U	U	U

**Historic Comparison of Groundwater Analytical Results
Former City Hall - Key West, FL**

Well ID	Sample Date	Chloro-benzene	B Benzene	T Toluene	E Ethylbenzene	X Xylenes	Total BTEX	MTBE
Ch. 52-770 Table 5 Groundwater Cleanup Target Levels	N/A	Limit not set	40*	40	30	20	91	50
Ch. 52-770 Table 5 Natural Attenuation Default Limits	N/A	Limit not set	400*	400	300	200	910	500
MW-3	1/16/1996	U	U	U	U	U	U	U
	10/19/1999	U	U	U	U	U	U	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	NS	NS	NS	NS	NS	NS	NS
	5/52011	NS	NS	NS	NS	NS	NS	NS
	12/17/2013	U	<1	7.09	<1	<1	8.95	1.3
MW-4	1/16/1996	U	U	U	U	U	U	U
	10/19/1999	U	U	U	U	U	U	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	NS	NS	NS	NS	NS	NS	NS
	5/52011	NS	NS	NS	NS	NS	NS	NS
	12/17/2013	NS	NS	NS	NS	NS	NS	NS
MW-5	1/16/1996	U	8.6	U	U	U	8.6	U
	10/19/1999	U	U	U	U	U	U	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	U	U	U	U	U	U	U
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	U	U	U	U	U	U	U
	5/52011	NS	NS	NS	NS	NS	NS	NS
	12/17/2013	U	U	U	U	U	U	U

**Historic Comparison of Groundwater Analytical Results
Former City Hall - Key West, FL**

Well ID	Sample Date	Chloro-benzene	B Benzene	T Toluene	E Ethylbenzene	X Xylenes	Total BTEX	MTBE
Ch. 52-770 Table 5 Groundwater Cleanup Target Levels	N/A	Limit not set	40*	40	30	20	91	50
Ch. 52-770 Table 5 Natural Attenuation Default Limits	N/A	Limit not set	400*	400	300	200	910	500
MW-6	1/16/1996	U	U	1.5	19.2	39.7	60.4	U
	10/19/1999	U	1	8	94	33	136	U
	10/19/2000	U	U	U	U	U	U	U
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	<1	8.3	9.6	54	22	93.9	<1
	6/19/2002	NS	5.5	5.9	25	14	50.4	<1
	7/11/2003	<1	4.8	9.8	25	8	47.6	<1
	5/18/2007	U	U	U	U	U	U	U
	5/52011	U	U	U	1.7	U	1.7	U
	12/17/2013	U	U	U	U	U	U	U
MW-7	1/16/1996	U	U	U	U	U	U	U
	10/19/1999	U	U	U	U	U	U	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	U	U	U	U	U	U	U
	5/52011	NS	NS	NS	NS	NS	NS	NS
	12/17/2013	NS	NS	NS	NS	NS	NS	NS
MW-8	1/16/1996	U	11.1	17.7	1402	236	1667	U
	10/19/1999	U	U	2.8	85	7.6	95.4	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	U	5.15	U	141	6.2	152.4	U
	5/52011	U	12	2.2	26	8.6	48.8	U
	12/17/2013	U	5.3	1.4	65	3.8	75.5	U

**Historic Comparison of Groundwater Analytical Results
Former City Hall - Key West, FL**

Well ID	Sample Date	Chloro-benzene	B Benzene	T Toluene	E Ethylbenzene	X Xylenes	Total BTEX	MTBE
Ch. 52-770 Table 5 Groundwater Cleanup Target Levels	N/A	Limit not set	40*	40	30	20	91	50
Ch. 52-770 Table 5 Natural Attenuation Default Limits	N/A	Limit not set	400*	400	300	200	910	500
MW-9	1/16/1996	NS	NS	NS	NS	NS	NS	NS
	10/19/1999	U	U	U	U	U	U	U
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	U	U	U	U	U	U	U
	5/52011	CLD	CLD	CLD	CLD	CLD	CLD	CLD
	12/17/2013	CLD	CLD	CLD	CLD	CLD	CLD	CLD
MW-10	1/16/1996	U	340	26.8	1615	2400	4382	U
	10/19/1999	U	330	22	260	81	693	U
	10/19/2000	U	260	11	3.2	40	314.2	U
	4/16/2001	U	370	30	450	130	980	U
	10/31/2001	U	220	16	620	120	976	U
	1/11/2002	U	240	20	360	70	690	U
	6/19/2002	NS	200	22	340	120	682	U
	7/11/2003	U	120	15	180	57	372	U
	5/18/2007	U	72.8	13.7	418	45.1	549.6	U
	5/52011	U	21	3.8	65	13	102.8	U
	12/17/2013	U	22	4.1	140	15	181.1	U
	MW-11	1/16/1996	U	U	U	U	U	U
10/19/1999		U	U	U	U	U	U	U
10/19/2000		NS	NS	NS	NS	NS	NS	NS
4/16/2001		NS	NS	NS	NS	NS	NS	NS
10/31/2001		NS	NS	NS	NS	NS	NS	NS
1/11/2002		NS	NS	NS	NS	NS	NS	NS
6/19/2002		NS	NS	NS	NS	NS	NS	NS
7/11/2003		NS	NS	NS	NS	NS	NS	NS
5/18/2007		U	U	U	U	U	U	U
5/52011		CLD	CLD	CLD	CLD	CLD	CLD	CLD
12/17/2013		CLD	CLD	CLD	CLD	CLD	CLD	CLD

**Historic Comparison of Groundwater Analytical Results
Former City Hall - Key West, FL**

Well ID	Sample Date	Chloro-benzene	B Benzene	T Toluene	E Ethylbenzene	X Xylenes	Total BTEX	MTBE
Ch. 52-770 Table 5 Groundwater Cleanup Target Levels	N/A	Limit not set	40*	40	30	20	91	50
Ch. 52-770 Table 5 Natural Attenuation Default Limits	N/A	Limit not set	400*	400	300	200	910	500
MW-12	1/16/1996	U	U	U	U	U	U	U
	10/19/1999	CNF	CNF	CNF	CNF	CNF	CNF	CNF
	10/19/2000	NS	NS	NS	NS	NS	NS	NS
	4/16/2001	NS	NS	NS	NS	NS	NS	NS
	10/31/2001	NS	NS	NS	NS	NS	NS	NS
	1/11/2002	NS	NS	NS	NS	NS	NS	NS
	6/19/2002	NS	NS	NS	NS	NS	NS	NS
	7/11/2003	NS	NS	NS	NS	NS	NS	NS
	5/18/2007	CNF	CNF	CNF	CNF	CNF	CNF	CNF
	5/5/2011	CNF	CNF	CNF	CNF	CNF	CNF	CNF
12/17/2013	CNF	CNF	CNF	CNF	CNF	CNF	CNF	

Notes:

- 1) *Established in December 29, 2000 DEP letter approving Natural Attenuation Monitoring Plan
- 2) Bold type indicated exceedance of agreed target level
- 3) Cap of monitoring well lost after 10/22/00 sampling event, replaced before next event
- 4) All measurements in micrograms per liter
- 5) MTBE = methyl-tert-butyl ether
- 6) CNF = could not find well
- 7) NS = not sampled
- 8) CLD = Closed/Abandoned
- 9) U = Undetected

Appendix B. Summary of Groundwater Analytical Data

Table 1
SUMMARY OF GROUNDWATER ANALYTICAL DATA - Volatile Organics
CITY OF KEY WEST CITY HALL SITE-SARA Additional Sampling

	Well:			MW-1	MW-1	DW-1	MW-2	MW-2	MW-3	MW-5	MW-6	MW-6	MW-8	MW-8	MW-10	MW-10
	Date of Sampling:			5/5/11	12/17/13	12/17/13	5/5/11	12/17/13	12/17/13	12/17/13	5/5/11	12/17/13	5/5/11	12/17/13	5/5/11	12/17/13
	Standard ⁽¹⁾	MDL	Units													
Organics																
Acetone	6,300	3	ug/l	U	U	U	U	U	U	U	3.3 I	U	5.7 I	U	4.7 I	U
Benzene	1	0.13	ug/l	13	16	U	U	U	0.97 I	U	U	U	12	5.3	21	22
Ethylbenzene	30	0.16	ug/l	37	16	U	U	U	0.17 I	U	1.7	U	26	65	65	140
n-Butylbenzene	--	0.21	ug/l	25	U	U	U	U	U	U	0.48 I	U	13	20	13	43
sec-Butylbenzene	--	0.21	ug/l	16	4.5	U	U	U	2.4	U	0.29 I	U	11	14	7.4	25
tert-Butylbenzene	--	0.18	ug/l	U	0.37 I	U	U	U	U	U	U	U	U	0.60 I	U	U
Isopropylbenzene (cumene)	0.8	0.15	ug/l	95	32	U	U	U	3.2	U	3.4	U	57	69	91	180
N-Propylbenzene	--	0.2	ug/l	240	63	U	U	U	3.7	U	9.3	U	94	120	190	530
1,2,4-Trimethylbenzene	10	0.14	ug/l	1.8	0.34 I	U	U	U	U	U	U	U	1	0.77 I	1.8	3.6
1,3,5-Trimethylbenzene	10	0.17	ug/l	2.1	U	U	U	U	U	U	U	U	2.5	0.28 I	1.4	2.4
Carbon disulfide	700	0.13	ug/l	U	U	U	U	U	U	U	U	U	0.72 I	U	0.80 I	U
Chloroform	70	0.12	ug/l	U	U	U	1.3	0.41 I	U	1.4	3.4	U	U	U	U	U
cis-1,2-Dichloroethene	70	0.22	ug/l	U	U	U	0.45 I	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene, Total	--	0.45	ug/l	U	U	U	0.45 I	U	U	U	U	U	U	U	U	U
2-Hexanone	280	1	ug/l	U	1 I	U	U	U	U	U	U	U	U	U	U	U
Toluene	40	0.14	ug/l	2.6	1.6	U	U	U	7.09	U	U	U	2.2	1.4	3.8	4.1
4-Isopropyltoluene	--	0.16	ug/l	0.32 I	U	U	U	U	U	U	U	U	0.29 I	0.17 I	U	0.72 I
m-Xylene & p-Xylene	--	0.3	ug/l	7.3	1.6 I	U	U	U	0.52 I	U	U	U	6.3	2.1	11	13
o-Xylene	--	0.15	ug/l	2.6	0.74 I	U	U	U	0.20 I	U	U	U	2.3	1.7	2.1	1.8
Total Xylenes	20	0.44	ug/l	9.9	2.3	U	U	U	0.72 I	U	U	U	8.6	3.8	13	15
1-Methylnaphthalene	28	0.04	ug/l	U	6.5	U	U	U	2.4	U	U	U	U	29	U	84
2-Methylnaphthalene	28	0.03	ug/l	U	0.37	U	U	U	0.56	U	U	U	U	26	U	100
Acenaphthene	20	0.04	ug/l	U	0.22	U	U	U	0.2	U	U	U	U	0.32	U	0.59 I
Acenaphthylene	210	0.025	ug/l	U	0.025 I	U	U	U	U	U	U	U	U	0.061 I	U	U
Fluorene	280	0.04	ug/l	U	0.14 I	U	U	U	U	U	U	U	U	0.3	U	0.84
Methyl tert-butyl ether	20	0.13	ug/l	U	U	U	U	U	1.3	U	U	U	U	U	U	U
Naphthalene	14	0.04	ug/l	43	36	U	U	U	0.73	U	3.8 I	U	61	32	99	89
Phenanthrene	210	0.04	ug/l	U	0.21	U	U	U	U	U	U	U	U	0.26	U	0.99
Pyrene	210	0.025	ug/l	U	U	U	U	U	U	U	U	U	U	0.035 I	U	U

⁽¹⁾ Maximum Contaminant Level (MCL) or Secondary Drinking Water Standard (SDWS), per Chapter 62-550 or Chapter 62-777. **Bold** data indicates an exceedence of either the MCL or SDWS

MDL = Method Detection Limit U = Undetected I = between Method Detection Limit and Practical Quantitation Limit J = One or more QC samples associated with this data value exceeded QC limits

Appendix C. December 2013 Sampling Event Laboratory Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-46223-1

Client Project/Site: Key West Groundwater

For:

Atkins North America Inc
2001 NW 107th Avenue
Miami, Florida 33172

Attn: Mr. Mark Henry



Authorized for release by:
1/2/2014 4:50:33 PM

Amy Marks, Project Manager II
(850)878-3994
amy.marks@testamericainc.com

LINKS

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results through
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Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
L	Off-scale high. Actual value is known to be greater than the value given.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Glossary

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

Case Narrative

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Job ID: 640-46223-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative 640-46223-1

Comments

No additional comments.

Receipt

The samples were received on 12/20/2013 at 8:00 AM. The samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 106782 recovered above the current instrument calibration range for Bromomethane. This compound was not detected in the associated samples and was within accuracy (%Rec) and precision (RPD) control limits; therefore, the results have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 106782 recovered outside control limits for Carbon Tetrachloride. This analyte was biased high in the LCS and LCSD and was not detected in the associated samples; therefore, the results have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 106814 recovered outside control limits and above the instrument calibration range for Bromomethane. This analyte was biased high in the LCS and LCSD and was not detected in the associated samples; therefore, the results have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 106825 recovered outside control limits and above the instrument calibration range for Bromomethane. This analyte was biased high in the LCS and LCSD and was not detected in the associated samples; therefore, the results have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 106827 recovered above the current instrument calibration range for Bromomethane. This compound was not detected in the associated samples and was within accuracy (%Rec) and precision (RPD) control limits; therefore, the results have been reported and qualified.

Method 8260C: The laboratory control sample duplicate (LCSD) associated with batch 106827 recovered outside control limits for Carbon tetrachloride. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the results have been reported and qualified.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Organic Prep

Method 3520C: Insufficient sample volume was available to perform batch matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 106657. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

Detection Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-2

Lab Sample ID: 640-46223-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.41	I	1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: Equipment Blank

Lab Sample ID: 640-46223-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.7	I	5.0	0.21	ug/L	1		8260C	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 640-46223-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	22		1.0	0.13	ug/L	1		8260C	Total/NA
4-Isopropyltoluene	0.72	I	1.0	0.16	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	13		2.0	0.30	ug/L	1		8260C	Total/NA
n-Butylbenzene	43		1.0	0.21	ug/L	1		8260C	Total/NA
o-Xylene	1.8		1.0	0.15	ug/L	1		8260C	Total/NA
sec-Butylbenzene	25		1.0	0.21	ug/L	1		8260C	Total/NA
Toluene	4.1		1.0	0.14	ug/L	1		8260C	Total/NA
1,2,4-Trimethylbenzene	3.6		1.0	0.14	ug/L	1		8260C	Total/NA
1,3,5-Trimethylbenzene	2.4		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	15		2.0	0.44	ug/L	1		8260C	Total/NA
Ethylbenzene - DL	140		20	3.2	ug/L	20		8260C	Total/NA
Isopropylbenzene - DL	180		20	3.0	ug/L	20		8260C	Total/NA
N-Propylbenzene - DL	530		20	4.0	ug/L	20		8260C	Total/NA
Acenaphthene	0.59	I	0.80	0.16	ug/L	4		8270D LL	Total/NA
Fluorene	0.84		0.80	0.16	ug/L	4		8270D LL	Total/NA
1-Methylnaphthalene	84		0.80	0.16	ug/L	4		8270D LL	Total/NA
2-Methylnaphthalene	100		0.80	0.12	ug/L	4		8270D LL	Total/NA
Naphthalene	89		0.80	0.16	ug/L	4		8270D LL	Total/NA
Phenanthrene	0.99		0.80	0.16	ug/L	4		8270D LL	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 640-46223-4

No Detections.

Client Sample ID: MW-1

Lab Sample ID: 640-46223-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	16		1.0	0.13	ug/L	1		8260C	Total/NA
Ethylbenzene	16		1.0	0.16	ug/L	1		8260C	Total/NA
2-Hexanone	1.0	I	10	1.0	ug/L	1		8260C	Total/NA
Isopropylbenzene	32		1.0	0.15	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	1.6	I	2.0	0.30	ug/L	1		8260C	Total/NA
N-Propylbenzene	63		1.0	0.20	ug/L	1		8260C	Total/NA
o-Xylene	0.74	I	1.0	0.15	ug/L	1		8260C	Total/NA
sec-Butylbenzene	4.5		1.0	0.21	ug/L	1		8260C	Total/NA
tert-Butylbenzene	0.37	I	1.0	0.18	ug/L	1		8260C	Total/NA
Toluene	1.6		1.0	0.14	ug/L	1		8260C	Total/NA
1,2,4-Trimethylbenzene	0.34	I	1.0	0.14	ug/L	1		8260C	Total/NA
Xylenes, Total	2.3		2.0	0.44	ug/L	1		8260C	Total/NA
Acenaphthene	0.22		0.20	0.040	ug/L	1		8270D LL	Total/NA
Acenaphthylene	0.025	I	0.20	0.025	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Detection Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-1 (Continued)

Lab Sample ID: 640-46223-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Fluorene	0.14	I	0.20	0.040	ug/L			1	8270D LL	Total/NA
1-Methylnaphthalene	6.5		0.20	0.040	ug/L			1	8270D LL	Total/NA
2-Methylnaphthalene	0.37		0.20	0.031	ug/L			1	8270D LL	Total/NA
Naphthalene	36		0.20	0.040	ug/L			1	8270D LL	Total/NA
Phenanthrene	0.21		0.20	0.040	ug/L			1	8270D LL	Total/NA

Client Sample ID: DW-1

Lab Sample ID: 640-46223-6

No Detections.

Client Sample ID: MW-3

Lab Sample ID: 640-46223-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	0.97	I	1.0	0.13	ug/L			1	8260C	Total/NA
Ethylbenzene	0.17	I	1.0	0.16	ug/L			1	8260C	Total/NA
Isopropylbenzene	3.2		1.0	0.15	ug/L			1	8260C	Total/NA
Methyl tert-butyl ether	1.3		1.0	0.13	ug/L			1	8260C	Total/NA
m-Xylene & p-Xylene	0.52	I	2.0	0.30	ug/L			1	8260C	Total/NA
N-Propylbenzene	3.7		1.0	0.20	ug/L			1	8260C	Total/NA
o-Xylene	0.20	I	1.0	0.15	ug/L			1	8260C	Total/NA
sec-Butylbenzene	2.4		1.0	0.21	ug/L			1	8260C	Total/NA
Xylenes, Total	0.72	I	2.0	0.44	ug/L			1	8260C	Total/NA
Acenaphthene	0.20		0.20	0.040	ug/L			1	8270D LL	Total/NA
1-Methylnaphthalene	2.4		0.20	0.040	ug/L			1	8270D LL	Total/NA
2-Methylnaphthalene	0.56		0.20	0.031	ug/L			1	8270D LL	Total/NA
Naphthalene	0.73		0.20	0.040	ug/L			1	8270D LL	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 640-46223-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	5.3		1.0	0.13	ug/L			1	8260C	Total/NA
Ethylbenzene	65		1.0	0.16	ug/L			1	8260C	Total/NA
Isopropylbenzene	69		1.0	0.15	ug/L			1	8260C	Total/NA
4-Isopropyltoluene	0.17	I	1.0	0.16	ug/L			1	8260C	Total/NA
m-Xylene & p-Xylene	2.1		2.0	0.30	ug/L			1	8260C	Total/NA
n-Butylbenzene	20		1.0	0.21	ug/L			1	8260C	Total/NA
o-Xylene	1.7		1.0	0.15	ug/L			1	8260C	Total/NA
sec-Butylbenzene	14		1.0	0.21	ug/L			1	8260C	Total/NA
tert-Butylbenzene	0.60	I	1.0	0.18	ug/L			1	8260C	Total/NA
Toluene	1.4		1.0	0.14	ug/L			1	8260C	Total/NA
1,2,4-Trimethylbenzene	0.77	I	1.0	0.14	ug/L			1	8260C	Total/NA
1,3,5-Trimethylbenzene	0.28	I	1.0	0.17	ug/L			1	8260C	Total/NA
Xylenes, Total	3.8		2.0	0.44	ug/L			1	8260C	Total/NA
N-Propylbenzene - DL	120		10	2.0	ug/L			10	8260C	Total/NA
Acenaphthene	0.32		0.20	0.040	ug/L			1	8270D LL	Total/NA
Acenaphthylene	0.061	I	0.20	0.025	ug/L			1	8270D LL	Total/NA
Fluorene	0.30		0.20	0.040	ug/L			1	8270D LL	Total/NA
1-Methylnaphthalene	29		0.20	0.040	ug/L			1	8270D LL	Total/NA
2-Methylnaphthalene	26		0.20	0.031	ug/L			1	8270D LL	Total/NA
Naphthalene	32		0.20	0.040	ug/L			1	8270D LL	Total/NA
Phenanthrene	0.26		0.20	0.040	ug/L			1	8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Detection Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-8 (Continued)

Lab Sample ID: 640-46223-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.035	I	0.20	0.025	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 640-46223-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.4		1.0	0.12	ug/L	1		8260C	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 640-46223-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.4	I	5.0	0.21	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-2

Lab Sample ID: 640-46223-1

Date Collected: 12/17/13 08:35

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 14:38	1
Benzene	0.13	U	1.0	0.13	ug/L			12/30/13 14:38	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 14:38	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 14:38	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 14:38	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 14:38	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 14:38	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 14:38	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 14:38	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 14:38	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 14:38	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 14:38	1
Chloroform	0.41	I	1.0	0.12	ug/L			12/30/13 14:38	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 14:38	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 14:38	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 14:38	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 14:38	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 14:38	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 14:38	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 14:38	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 14:38	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 14:38	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 14:38	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 14:38	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 14:38	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 14:38	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 14:38	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 14:38	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 14:38	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 14:38	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 14:38	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 14:38	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 14:38	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 14:38	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 14:38	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 14:38	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 14:38	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 14:38	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 14:38	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 14:38	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 14:38	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 14:38	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 14:38	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 14:38	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 14:38	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 14:38	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 14:38	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 14:38	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 14:38	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-2

Lab Sample ID: 640-46223-1

Date Collected: 12/17/13 08:35

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 14:38	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 14:38	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 14:38	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 14:38	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 14:38	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 14:38	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 14:38	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 14:38	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 14:38	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 14:38	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 14:38	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 14:38	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 14:38	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 14:38	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 14:38	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 14:38	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		87 - 114		12/30/13 14:38	1
Dibromofluoromethane	100		81 - 113		12/30/13 14:38	1
Toluene-d8 (Surr)	104		87 - 112		12/30/13 14:38	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1
Fluorene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 22:00	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		12/21/13 16:29	12/22/13 22:00	1
Naphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:00	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		40 - 114	12/21/13 16:29	12/22/13 22:00	1

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: Equipment Blank

Lab Sample ID: 640-46223-2

Date Collected: 12/17/13 08:15

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 17:06	1
Benzene	0.13	U	1.0	0.13	ug/L			12/30/13 17:06	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 17:06	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 17:06	1
Bromomethane	0.51	J3 U	1.0	0.51	ug/L			12/30/13 17:06	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 17:06	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 17:06	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			12/30/13 17:06	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 17:06	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 17:06	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 17:06	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 17:06	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 17:06	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 17:06	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 17:06	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 17:06	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 17:06	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 17:06	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 17:06	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 17:06	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 17:06	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 17:06	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 17:06	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 17:06	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 17:06	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 17:06	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 17:06	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 17:06	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 17:06	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 17:06	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 17:06	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 17:06	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 17:06	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 17:06	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 17:06	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 17:06	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 17:06	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 17:06	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 17:06	1
Methylene Chloride	1.7	I	5.0	0.21	ug/L			12/30/13 17:06	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 17:06	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 17:06	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 17:06	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 17:06	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 17:06	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 17:06	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 17:06	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 17:06	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 17:06	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: Equipment Blank

Lab Sample ID: 640-46223-2

Date Collected: 12/17/13 08:15

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 17:06	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 17:06	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 17:06	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 17:06	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 17:06	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 17:06	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 17:06	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 17:06	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 17:06	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 17:06	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 17:06	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 17:06	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 17:06	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 17:06	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 17:06	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 17:06	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		87 - 114		12/30/13 17:06	1
Dibromofluoromethane	103		81 - 113		12/30/13 17:06	1
Toluene-d8 (Surr)	102		87 - 112		12/30/13 17:06	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1
Fluorene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 22:19	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		12/21/13 16:29	12/22/13 22:19	1
Naphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:19	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	59		40 - 114	12/21/13 16:29	12/22/13 22:19	1

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-10

Lab Sample ID: 640-46223-3

Date Collected: 12/17/13 09:12

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 15:43	1
Benzene	22		1.0	0.13	ug/L			12/30/13 15:43	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 15:43	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 15:43	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 15:43	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 15:43	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 15:43	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 15:43	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 15:43	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:43	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:43	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 15:43	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 15:43	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 15:43	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 15:43	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 15:43	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 15:43	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:43	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 15:43	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:43	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 15:43	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:43	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 15:43	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 15:43	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 15:43	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:43	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:43	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 15:43	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 15:43	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 15:43	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 15:43	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 15:43	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 15:43	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 15:43	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 15:43	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 15:43	1
4-Isopropyltoluene	0.72	I	1.0	0.16	ug/L			12/30/13 15:43	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 15:43	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 15:43	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 15:43	1
m-Xylene & p-Xylene	13		2.0	0.30	ug/L			12/30/13 15:43	1
n-Butylbenzene	43		1.0	0.21	ug/L			12/30/13 15:43	1
o-Xylene	1.8		1.0	0.15	ug/L			12/30/13 15:43	1
sec-Butylbenzene	25		1.0	0.21	ug/L			12/30/13 15:43	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 15:43	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 15:43	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 15:43	1
1,1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 15:43	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 15:43	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-10

Lab Sample ID: 640-46223-3

Date Collected: 12/17/13 09:12

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	4.1		1.0	0.14	ug/L			12/30/13 15:43	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 15:43	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:43	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 15:43	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 15:43	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 15:43	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:43	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 15:43	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:43	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 15:43	1
1,2,4-Trimethylbenzene	3.6		1.0	0.14	ug/L			12/30/13 15:43	1
1,3,5-Trimethylbenzene	2.4		1.0	0.17	ug/L			12/30/13 15:43	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 15:43	1
Xylenes, Total	15		2.0	0.44	ug/L			12/30/13 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		87 - 114					12/30/13 15:43	1
Dibromofluoromethane	102		81 - 113					12/30/13 15:43	1
Toluene-d8 (Surr)	103		87 - 112					12/30/13 15:43	1

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	140		20	3.2	ug/L			12/31/13 13:46	20
Isopropylbenzene	180		20	3.0	ug/L			12/31/13 13:46	20
N-Propylbenzene	530		20	4.0	ug/L			12/31/13 13:46	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		87 - 114					12/31/13 13:46	20
Dibromofluoromethane	100		81 - 113					12/31/13 13:46	20
Toluene-d8 (Surr)	106		87 - 112					12/31/13 13:46	20

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.59	I	0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
Acenaphthylene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Anthracene	0.16	U	0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
Benzo[a]anthracene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Benzo[a]pyrene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Benzo[b]fluoranthene	0.10	U	0.40	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Benzo[g,h,i]perylene	0.16	U	0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
Benzo[k]fluoranthene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Chrysene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Dibenz(a,h)anthracene	0.16	U	0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
Fluoranthene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Fluorene	0.84		0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
Indeno[1,2,3-cd]pyrene	0.18	U	0.80	0.18	ug/L		12/21/13 16:29	12/23/13 15:11	4
1-Methylnaphthalene	84		0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
2-Methylnaphthalene	100		0.80	0.12	ug/L		12/21/13 16:29	12/23/13 15:11	4
Naphthalene	89		0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4
Phenanthrene	0.99		0.80	0.16	ug/L		12/21/13 16:29	12/23/13 15:11	4

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-10
Date Collected: 12/17/13 09:12
Date Received: 12/20/13 08:00

Lab Sample ID: 640-46223-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.10	U	0.80	0.10	ug/L		12/21/13 16:29	12/23/13 15:11	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	70		40 - 114				12/21/13 16:29	12/23/13 15:11	4

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-6

Lab Sample ID: 640-46223-4

Date Collected: 12/17/13 09:50

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 15:00	1
Benzene	0.13	U	1.0	0.13	ug/L			12/30/13 15:00	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 15:00	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 15:00	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 15:00	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 15:00	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 15:00	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 15:00	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 15:00	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:00	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:00	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 15:00	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 15:00	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 15:00	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 15:00	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 15:00	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 15:00	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:00	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 15:00	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:00	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 15:00	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:00	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 15:00	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 15:00	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 15:00	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:00	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:00	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 15:00	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 15:00	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 15:00	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 15:00	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 15:00	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 15:00	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 15:00	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 15:00	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 15:00	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 15:00	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 15:00	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 15:00	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 15:00	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 15:00	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 15:00	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 15:00	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 15:00	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 15:00	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 15:00	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 15:00	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 15:00	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 15:00	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-6

Lab Sample ID: 640-46223-4

Date Collected: 12/17/13 09:50

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 15:00	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 15:00	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 15:00	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 15:00	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 15:00	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:00	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 15:00	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 15:00	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 15:00	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:00	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 15:00	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:00	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 15:00	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 15:00	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:00	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 15:00	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		87 - 114		12/30/13 15:00	1
Dibromofluoromethane	99		81 - 113		12/30/13 15:00	1
Toluene-d8 (Surr)	105		87 - 112		12/30/13 15:00	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1
Fluorene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 22:57	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		12/21/13 16:29	12/22/13 22:57	1
Naphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 22:57	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 22:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		40 - 114	12/21/13 16:29	12/22/13 22:57	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-1

Lab Sample ID: 640-46223-5

Date Collected: 12/17/13 10:19

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 15:22	1
Benzene	16		1.0	0.13	ug/L			12/30/13 15:22	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 15:22	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 15:22	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 15:22	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 15:22	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 15:22	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 15:22	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 15:22	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:22	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:22	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 15:22	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 15:22	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 15:22	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 15:22	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 15:22	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 15:22	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:22	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 15:22	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:22	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 15:22	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:22	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 15:22	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 15:22	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 15:22	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:22	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:22	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 15:22	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 15:22	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 15:22	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 15:22	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 15:22	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 15:22	1
Ethylbenzene	16		1.0	0.16	ug/L			12/30/13 15:22	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 15:22	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 15:22	1
2-Hexanone	1.0	I	10	1.0	ug/L			12/30/13 15:22	1
Isopropylbenzene	32		1.0	0.15	ug/L			12/30/13 15:22	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 15:22	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 15:22	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 15:22	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 15:22	1
m-Xylene & p-Xylene	1.6	I	2.0	0.30	ug/L			12/30/13 15:22	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 15:22	1
N-Propylbenzene	63		1.0	0.20	ug/L			12/30/13 15:22	1
o-Xylene	0.74	I	1.0	0.15	ug/L			12/30/13 15:22	1
sec-Butylbenzene	4.5		1.0	0.21	ug/L			12/30/13 15:22	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 15:22	1
tert-Butylbenzene	0.37	I	1.0	0.18	ug/L			12/30/13 15:22	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-1

Lab Sample ID: 640-46223-5

Date Collected: 12/17/13 10:19

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 15:22	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 15:22	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 15:22	1
Toluene	1.6		1.0	0.14	ug/L			12/30/13 15:22	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 15:22	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:22	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 15:22	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 15:22	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 15:22	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:22	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 15:22	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:22	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 15:22	1
1,2,4-Trimethylbenzene	0.34	I	1.0	0.14	ug/L			12/30/13 15:22	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:22	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 15:22	1
Xylenes, Total	2.3		2.0	0.44	ug/L			12/30/13 15:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		87 - 114		12/30/13 15:22	1
Dibromofluoromethane	100		81 - 113		12/30/13 15:22	1
Toluene-d8 (Surr)	104		87 - 112		12/30/13 15:22	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.22		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Acenaphthylene	0.025	I	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1
Fluorene	0.14	I	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 23:15	1
1-Methylnaphthalene	6.5		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
2-Methylnaphthalene	0.37		0.20	0.031	ug/L		12/21/13 16:29	12/22/13 23:15	1
Naphthalene	36		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Phenanthrene	0.21		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:15	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	80		40 - 114	12/21/13 16:29	12/22/13 23:15	1

Client Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: DW-1
Date Collected: 12/17/13 11:07
Date Received: 12/20/13 08:00

Lab Sample ID: 640-46223-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 13:55	1
Benzene	0.13	U	1.0	0.13	ug/L			12/30/13 13:55	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 13:55	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 13:55	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 13:55	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 13:55	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 13:55	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 13:55	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 13:55	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 13:55	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 13:55	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 13:55	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 13:55	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 13:55	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 13:55	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 13:55	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 13:55	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 13:55	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 13:55	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 13:55	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 13:55	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 13:55	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 13:55	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 13:55	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 13:55	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 13:55	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 13:55	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 13:55	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 13:55	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 13:55	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 13:55	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 13:55	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 13:55	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 13:55	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 13:55	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 13:55	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 13:55	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 13:55	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 13:55	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 13:55	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 13:55	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 13:55	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 13:55	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 13:55	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 13:55	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 13:55	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 13:55	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 13:55	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 13:55	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: DW-1

Lab Sample ID: 640-46223-6

Date Collected: 12/17/13 11:07

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 13:55	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 13:55	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 13:55	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 13:55	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 13:55	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 13:55	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 13:55	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 13:55	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 13:55	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 13:55	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 13:55	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 13:55	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 13:55	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 13:55	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 13:55	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 13:55	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 13:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		87 - 114		12/30/13 13:55	1
Dibromofluoromethane	98		81 - 113		12/30/13 13:55	1
Toluene-d8 (Surr)	106		87 - 112		12/30/13 13:55	1

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-3

Lab Sample ID: 640-46223-7

Date Collected: 12/17/13 12:39

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 14:17	1
Benzene	0.97	I	1.0	0.13	ug/L			12/30/13 14:17	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 14:17	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 14:17	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 14:17	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 14:17	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 14:17	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 14:17	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 14:17	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 14:17	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 14:17	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 14:17	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 14:17	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 14:17	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 14:17	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 14:17	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 14:17	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 14:17	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 14:17	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 14:17	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 14:17	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 14:17	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 14:17	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 14:17	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 14:17	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 14:17	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 14:17	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 14:17	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 14:17	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 14:17	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 14:17	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 14:17	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 14:17	1
Ethylbenzene	0.17	I	1.0	0.16	ug/L			12/30/13 14:17	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 14:17	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 14:17	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 14:17	1
Isopropylbenzene	3.2		1.0	0.15	ug/L			12/30/13 14:17	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 14:17	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 14:17	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 14:17	1
Methyl tert-butyl ether	1.3		1.0	0.13	ug/L			12/30/13 14:17	1
m-Xylene & p-Xylene	0.52	I	2.0	0.30	ug/L			12/30/13 14:17	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 14:17	1
N-Propylbenzene	3.7		1.0	0.20	ug/L			12/30/13 14:17	1
o-Xylene	0.20	I	1.0	0.15	ug/L			12/30/13 14:17	1
sec-Butylbenzene	2.4		1.0	0.21	ug/L			12/30/13 14:17	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 14:17	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 14:17	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-3

Lab Sample ID: 640-46223-7

Date Collected: 12/17/13 12:39

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 14:17	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 14:17	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 14:17	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 14:17	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 14:17	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 14:17	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 14:17	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 14:17	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 14:17	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 14:17	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 14:17	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 14:17	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 14:17	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 14:17	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 14:17	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 14:17	1
Xylenes, Total	0.72	I	2.0	0.44	ug/L			12/30/13 14:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		87 - 114		12/30/13 14:17	1
Dibromofluoromethane	100		81 - 113		12/30/13 14:17	1
Toluene-d8 (Surr)	107		87 - 112		12/30/13 14:17	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.20		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1
Fluorene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 23:34	1
1-Methylnaphthalene	2.4		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
2-Methylnaphthalene	0.56		0.20	0.031	ug/L		12/21/13 16:29	12/22/13 23:34	1
Naphthalene	0.73		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:34	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	84		40 - 114	12/21/13 16:29	12/22/13 23:34	1

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-8
Date Collected: 12/17/13 13:06
Date Received: 12/20/13 08:00

Lab Sample ID: 640-46223-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 16:05	1
Benzene	5.3		1.0	0.13	ug/L			12/30/13 16:05	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 16:05	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 16:05	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 16:05	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 16:05	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 16:05	1
Carbon tetrachloride	0.18	J3 U	1.0	0.18	ug/L			12/30/13 16:05	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 16:05	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 16:05	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 16:05	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 16:05	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 16:05	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 16:05	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 16:05	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 16:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 16:05	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 16:05	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 16:05	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 16:05	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 16:05	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 16:05	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 16:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 16:05	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 16:05	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 16:05	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 16:05	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 16:05	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 16:05	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 16:05	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 16:05	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 16:05	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 16:05	1
Ethylbenzene	65		1.0	0.16	ug/L			12/30/13 16:05	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 16:05	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 16:05	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 16:05	1
Isopropylbenzene	69		1.0	0.15	ug/L			12/30/13 16:05	1
4-Isopropyltoluene	0.17	I	1.0	0.16	ug/L			12/30/13 16:05	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 16:05	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 16:05	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 16:05	1
m-Xylene & p-Xylene	2.1		2.0	0.30	ug/L			12/30/13 16:05	1
n-Butylbenzene	20		1.0	0.21	ug/L			12/30/13 16:05	1
o-Xylene	1.7		1.0	0.15	ug/L			12/30/13 16:05	1
sec-Butylbenzene	14		1.0	0.21	ug/L			12/30/13 16:05	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 16:05	1
tert-Butylbenzene	0.60	I	1.0	0.18	ug/L			12/30/13 16:05	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 16:05	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-8

Lab Sample ID: 640-46223-8

Date Collected: 12/17/13 13:06

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 16:05	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 16:05	1
Toluene	1.4		1.0	0.14	ug/L			12/30/13 16:05	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 16:05	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 16:05	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 16:05	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 16:05	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 16:05	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 16:05	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 16:05	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 16:05	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 16:05	1
1,2,4-Trimethylbenzene	0.77	I	1.0	0.14	ug/L			12/30/13 16:05	1
1,3,5-Trimethylbenzene	0.28	I	1.0	0.17	ug/L			12/30/13 16:05	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 16:05	1
Xylenes, Total	3.8		2.0	0.44	ug/L			12/30/13 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		87 - 114					12/30/13 16:05	1
Dibromofluoromethane	104		81 - 113					12/30/13 16:05	1
Toluene-d8 (Surr)	104		87 - 112					12/30/13 16:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	120		10	2.0	ug/L			12/31/13 13:24	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		87 - 114					12/31/13 13:24	10
Dibromofluoromethane	105		81 - 113					12/31/13 13:24	10
Toluene-d8 (Surr)	105		87 - 112					12/31/13 13:24	10

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.32		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
Acenaphthylene	0.061	I	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1
Fluorene	0.30		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 23:53	1
1-Methylnaphthalene	29		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
2-Methylnaphthalene	26		0.20	0.031	ug/L		12/21/13 16:29	12/22/13 23:53	1
Naphthalene	32		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1
Phenanthrene	0.26		0.20	0.040	ug/L		12/21/13 16:29	12/22/13 23:53	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-8

Lab Sample ID: 640-46223-8

Date Collected: 12/17/13 13:06

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.035	I	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	57		40 - 114	12/21/13 16:29	12/22/13 23:53	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-5

Lab Sample ID: 640-46223-9

Date Collected: 12/17/13 13:35

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/31/13 12:53	1
Benzene	0.13	U	1.0	0.13	ug/L			12/31/13 12:53	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/31/13 12:53	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/31/13 12:53	1
Bromomethane	0.51	J3 U	1.0	0.51	ug/L			12/31/13 12:53	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/31/13 12:53	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/31/13 12:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			12/31/13 12:53	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/31/13 12:53	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/31/13 12:53	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/31/13 12:53	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/31/13 12:53	1
Chloroform	1.4		1.0	0.12	ug/L			12/31/13 12:53	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/31/13 12:53	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/31/13 12:53	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/31/13 12:53	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/31/13 12:53	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/31/13 12:53	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/31/13 12:53	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:53	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/31/13 12:53	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/31/13 12:53	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/31/13 12:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/31/13 12:53	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/31/13 12:53	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:53	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/31/13 12:53	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/31/13 12:53	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/31/13 12:53	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/31/13 12:53	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/31/13 12:53	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/31/13 12:53	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/31/13 12:53	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/31/13 12:53	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/31/13 12:53	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/31/13 12:53	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/31/13 12:53	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/31/13 12:53	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/31/13 12:53	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/31/13 12:53	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/31/13 12:53	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/31/13 12:53	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/31/13 12:53	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/31/13 12:53	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/31/13 12:53	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/31/13 12:53	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/31/13 12:53	1
Styrene	0.12	U	1.0	0.12	ug/L			12/31/13 12:53	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/31/13 12:53	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-5

Lab Sample ID: 640-46223-9

Date Collected: 12/17/13 13:35

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/31/13 12:53	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/31/13 12:53	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/31/13 12:53	1
Toluene	0.14	U	1.0	0.14	ug/L			12/31/13 12:53	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/31/13 12:53	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/31/13 12:53	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/31/13 12:53	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/31/13 12:53	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/31/13 12:53	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:53	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/31/13 12:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/31/13 12:53	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/31/13 12:53	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/31/13 12:53	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/31/13 12:53	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/31/13 12:53	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/31/13 12:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		87 - 114		12/31/13 12:53	1
Dibromofluoromethane	102		81 - 113		12/31/13 12:53	1
Toluene-d8 (Surr)	99		87 - 112		12/31/13 12:53	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1
Fluorene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/23/13 00:12	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		12/21/13 16:29	12/23/13 00:12	1
Naphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/23/13 00:12	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/23/13 00:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	76		40 - 114	12/21/13 16:29	12/23/13 00:12	1

Client Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: Trip Blank

Lab Sample ID: 640-46223-10

Date Collected: 12/17/13 00:00

Matrix: Water

Date Received: 12/20/13 08:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 16:43	1
Benzene	0.13	U	1.0	0.13	ug/L			12/30/13 16:43	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 16:43	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 16:43	1
Bromomethane	0.51	J3 U	1.0	0.51	ug/L			12/30/13 16:43	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 16:43	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 16:43	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			12/30/13 16:43	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 16:43	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 16:43	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 16:43	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 16:43	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 16:43	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 16:43	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 16:43	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 16:43	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 16:43	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 16:43	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 16:43	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 16:43	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 16:43	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 16:43	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 16:43	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 16:43	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 16:43	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 16:43	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 16:43	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 16:43	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 16:43	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 16:43	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 16:43	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 16:43	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 16:43	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 16:43	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 16:43	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 16:43	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 16:43	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 16:43	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 16:43	1
Methylene Chloride	1.4	I	5.0	0.21	ug/L			12/30/13 16:43	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 16:43	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 16:43	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 16:43	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 16:43	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 16:43	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 16:43	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 16:43	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 16:43	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 16:43	1

TestAmerica Tallahassee

Client Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: Trip Blank

Lab Sample ID: 640-46223-10

Date Collected: 12/17/13 00:00

Matrix: Water

Date Received: 12/20/13 08:00

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 16:43	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 16:43	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 16:43	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 16:43	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 16:43	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 16:43	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 16:43	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 16:43	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 16:43	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 16:43	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 16:43	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 16:43	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 16:43	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 16:43	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 16:43	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 16:43	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		87 - 114		12/30/13 16:43	1
Dibromofluoromethane	102		81 - 113		12/30/13 16:43	1
Toluene-d8 (Surr)	100		87 - 112		12/30/13 16:43	1

Surrogate Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (87-114)	DBFM (81-113)	TOL (87-112)
640-46223-1	MW-2	95	100	104
640-46223-2	Equipment Blank	92	103	102
640-46223-3	MW-10	99	102	103
640-46223-3 - DL	MW-10	98	100	106
640-46223-4	MW-6	97	99	105
640-46223-5	MW-1	98	100	104
640-46223-6	DW-1	96	98	106
640-46223-7	MW-3	99	100	107
640-46223-8	MW-8	99	104	104
640-46223-8 - DL	MW-8	97	105	105
640-46223-9	MW-5	91	102	99
640-46223-10	Trip Blank	91	102	100
LCS 640-106782/2	Lab Control Sample	99	106	102
LCS 640-106814/3	Lab Control Sample	95	102	99
LCS 640-106825/3	Lab Control Sample	95	104	101
LCS 640-106827/3	Lab Control Sample	101	104	105
LCSD 640-106782/8	Lab Control Sample Dup	99	105	103
LCSD 640-106814/4	Lab Control Sample Dup	96	105	100
LCSD 640-106825/4	Lab Control Sample Dup	93	107	100
LCSD 640-106827/4	Lab Control Sample Dup	102	106	104
MB 640-106782/6	Method Blank	94	97	104
MB 640-106814/5	Method Blank	93	104	98
MB 640-106825/5	Method Blank	92	100	99
MB 640-106827/5	Method Blank	98	103	108

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTPH (40-114)
640-46223-1	MW-2	81
640-46223-2	Equipment Blank	59
640-46223-3	MW-10	70
640-46223-4	MW-6	75
640-46223-5	MW-1	80
640-46223-7	MW-3	84
640-46223-8	MW-8	57
640-46223-9	MW-5	76
LCS 640-106657/2-A	Lab Control Sample	79
LCSD 640-106657/3-A	Lab Control Sample Dup	71
MB 640-106657/1-A	Method Blank	64

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 640-106782/6

Matrix: Water

Analysis Batch: 106782

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			12/30/13 09:05	1
Benzene	0.13	U	1.0	0.13	ug/L			12/30/13 09:05	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/30/13 09:05	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/30/13 09:05	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/30/13 09:05	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/30/13 09:05	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/30/13 09:05	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			12/30/13 09:05	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/30/13 09:05	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/30/13 09:05	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 09:05	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 09:05	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 09:05	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 09:05	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 09:05	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 09:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 09:05	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 09:05	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 09:05	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 09:05	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 09:05	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 09:05	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 09:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 09:05	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 09:05	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 09:05	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 09:05	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 09:05	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 09:05	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 09:05	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 09:05	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 09:05	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 09:05	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 09:05	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 09:05	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 09:05	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 09:05	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 09:05	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 09:05	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 09:05	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 09:05	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 09:05	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 09:05	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 09:05	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 09:05	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 09:05	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 09:05	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 09:05	1

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: MB 640-106782/6

Matrix: Water

Analysis Batch: 106782

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 09:05	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 09:05	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 09:05	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 09:05	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 09:05	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 09:05	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 09:05	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 09:05	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 09:05	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 09:05	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 09:05	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 09:05	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 09:05	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 09:05	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 09:05	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 09:05	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 09:05	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 09:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		87 - 114		12/30/13 09:05	1
Dibromofluoromethane	97		81 - 113		12/30/13 09:05	1
Toluene-d8 (Surr)	104		87 - 112		12/30/13 09:05	1

Lab Sample ID: LCS 640-106782/2

Matrix: Water

Analysis Batch: 106782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	343		ug/L		114	64 - 132
Benzene	30.0	31.7		ug/L		106	80 - 120
Bromobenzene	30.0	31.0		ug/L		103	83 - 119
Bromoform	30.0	35.5		ug/L		118	64 - 132
Bromomethane	30.0	35.3	L	ug/L		118	37 - 146
2-Butanone (MEK)	300	347		ug/L		116	66 - 132
Carbon disulfide	30.0	34.6		ug/L		115	72 - 132
Carbon tetrachloride	30.0	38.9	J3	ug/L		130	79 - 126
Chlorobenzene	30.0	29.2		ug/L		97	82 - 116
Chlorobromomethane	30.0	35.5		ug/L		118	72 - 124
Chlorodibromomethane	30.0	33.3		ug/L		111	73 - 125
Chloroethane	30.0	30.4		ug/L		101	47 - 160
Chloroform	30.0	34.3		ug/L		114	81 - 120
Chloromethane	30.0	32.3		ug/L		108	61 - 136
2-Chlorotoluene	30.0	28.8		ug/L		96	83 - 116
4-Chlorotoluene	30.0	28.4		ug/L		95	79 - 118
cis-1,2-Dichloroethene	30.0	33.8		ug/L		113	75 - 128
cis-1,3-Dichloropropene	30.0	35.3		ug/L		118	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	33.0		ug/L		110	57 - 128

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCS 640-106782/2

Matrix: Water

Analysis Batch: 106782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	30.0	33.1		ug/L		110	80 - 119
1,2-Dichlorobenzene	30.0	28.9		ug/L		96	83 - 122
1,3-Dichlorobenzene	30.0	28.8		ug/L		96	85 - 119
1,4-Dichlorobenzene	30.0	28.8		ug/L		96	82 - 119
Dichlorobromomethane	30.0	34.9		ug/L		116	82 - 120
Dichlorodifluoromethane	30.0	29.9		ug/L		100	57 - 170
1,1-Dichloroethane	30.0	33.9		ug/L		113	78 - 124
1,2-Dichloroethane	30.0	31.3		ug/L		104	82 - 123
1,1-Dichloroethene	30.0	34.0		ug/L		113	72 - 133
1,2-Dichloroethene, Total	60.0	68.7		ug/L		115	77 - 127
1,2-Dichloropropane	30.0	32.6		ug/L		109	78 - 121
1,3-Dichloropropane	30.0	32.4		ug/L		108	70 - 124
2,2-Dichloropropane	30.0	34.6		ug/L		115	76 - 132
1,1-Dichloropropene	30.0	32.5		ug/L		108	84 - 123
Ethylbenzene	30.0	29.0		ug/L		97	85 - 119
Ethylene Dibromide	30.0	34.9		ug/L		116	78 - 120
Hexachlorobutadiene	30.0	26.8		ug/L		89	75 - 131
2-Hexanone	300	305		ug/L		102	54 - 132
Isopropylbenzene	30.0	30.9		ug/L		103	84 - 122
4-Isopropyltoluene	30.0	29.4		ug/L		98	77 - 125
Methylene Chloride	30.0	32.6		ug/L		109	75 - 125
4-Methyl-2-pentanone (MIBK)	300	311		ug/L		104	67 - 134
Methyl tert-butyl ether	30.0	34.9		ug/L		116	73 - 122
m-Xylene & p-Xylene	60.0	60.5		ug/L		101	86 - 123
n-Butylbenzene	30.0	27.9		ug/L		93	78 - 124
N-Propylbenzene	30.0	29.7		ug/L		99	84 - 120
o-Xylene	30.0	29.8		ug/L		99	85 - 123
sec-Butylbenzene	30.0	29.4		ug/L		98	78 - 125
Styrene	30.0	30.3		ug/L		101	86 - 121
tert-Butylbenzene	30.0	30.3		ug/L		101	72 - 126
1,1,1,2-Tetrachloroethane	30.0	34.2		ug/L		114	80 - 118
1,1,2,2-Tetrachloroethane	30.0	31.0		ug/L		103	78 - 118
Tetrachloroethene	30.0	29.8		ug/L		99	81 - 126
Toluene	30.0	32.7		ug/L		109	82 - 122
trans-1,2-Dichloroethene	30.0	34.9		ug/L		116	77 - 128
trans-1,3-Dichloropropene	30.0	33.0		ug/L		110	76 - 122
1,2,3-Trichlorobenzene	30.0	28.5		ug/L		95	64 - 128
1,2,4-Trichlorobenzene	30.0	27.4		ug/L		91	67 - 127
1,1,1-Trichloroethane	30.0	34.6		ug/L		115	85 - 122
1,1,2-Trichloroethane	30.0	33.8		ug/L		113	76 - 122
Trichloroethene	30.0	32.6		ug/L		109	82 - 121
Trichlorofluoromethane	30.0	32.9		ug/L		110	84 - 139
1,2,3-Trichloropropane	30.0	30.7		ug/L		102	79 - 128
1,2,4-Trimethylbenzene	30.0	30.4		ug/L		101	76 - 125
1,3,5-Trimethylbenzene	30.0	30.3		ug/L		101	76 - 125
Vinyl chloride	30.0	31.7		ug/L		106	70 - 139
Xylenes, Total	90.0	90.3		ug/L		100	86 - 123

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCS 640-106782/2

Matrix: Water

Analysis Batch: 106782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	99		87 - 114
Dibromofluoromethane	106		81 - 113
Toluene-d8 (Surr)	102		87 - 112

Lab Sample ID: LCSD 640-106782/8

Matrix: Water

Analysis Batch: 106782

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
Acetone	300	354		ug/L		118	64 - 132	3	28
Benzene	30.0	33.2		ug/L		111	80 - 120	5	20
Bromobenzene	30.0	30.5		ug/L		102	83 - 119	2	20
Bromoform	30.0	35.0		ug/L		117	64 - 132	1	20
Bromomethane	30.0	38.4	L	ug/L		128	37 - 146	9	38
2-Butanone (MEK)	300	343		ug/L		114	66 - 132	1	28
Carbon disulfide	30.0	35.9		ug/L		120	72 - 132	4	23
Carbon tetrachloride	30.0	40.0	J3	ug/L		133	79 - 126	3	20
Chlorobenzene	30.0	28.8		ug/L		96	82 - 116	1	20
Chlorobromomethane	30.0	36.3		ug/L		121	72 - 124	2	20
Chlorodibromomethane	30.0	32.2		ug/L		107	73 - 125	3	20
Chloroethane	30.0	31.7		ug/L		106	47 - 160	4	35
Chloroform	30.0	34.6		ug/L		115	81 - 120	1	20
Chloromethane	30.0	32.5		ug/L		108	61 - 136	1	20
2-Chlorotoluene	30.0	28.4		ug/L		95	83 - 116	1	20
4-Chlorotoluene	30.0	27.7		ug/L		92	79 - 118	2	20
cis-1,2-Dichloroethene	30.0	34.8		ug/L		116	75 - 128	3	20
cis-1,3-Dichloropropene	30.0	35.1		ug/L		117	79 - 120	1	20
1,2-Dibromo-3-Chloropropane	30.0	33.3		ug/L		111	57 - 128	1	25
Dibromomethane	30.0	33.0		ug/L		110	80 - 119	0	20
1,2-Dichlorobenzene	30.0	27.9		ug/L		93	83 - 122	3	20
1,3-Dichlorobenzene	30.0	28.7		ug/L		96	85 - 119	1	20
1,4-Dichlorobenzene	30.0	28.4		ug/L		95	82 - 119	2	20
Dichlorobromomethane	30.0	35.8		ug/L		119	82 - 120	3	20
Dichlorodifluoromethane	30.0	29.7		ug/L		99	57 - 170	1	39
1,1-Dichloroethane	30.0	34.9		ug/L		116	78 - 124	3	20
1,2-Dichloroethane	30.0	32.3		ug/L		108	82 - 123	3	20
1,1-Dichloroethene	30.0	35.1		ug/L		117	72 - 133	3	24
1,2-Dichloroethene, Total	60.0	70.2		ug/L		117	77 - 127	2	20
1,2-Dichloropropane	30.0	33.1		ug/L		110	78 - 121	1	20
1,3-Dichloropropane	30.0	32.5		ug/L		108	70 - 124	0	20
2,2-Dichloropropane	30.0	36.3		ug/L		121	76 - 132	5	20
1,1-Dichloropropene	30.0	33.5		ug/L		112	84 - 123	3	20
Ethylbenzene	30.0	29.6		ug/L		99	85 - 119	2	20
Ethylene Dibromide	30.0	35.1		ug/L		117	78 - 120	1	20
Hexachlorobutadiene	30.0	27.1		ug/L		90	75 - 131	1	24
2-Hexanone	300	300		ug/L		100	54 - 132	2	32
Isopropylbenzene	30.0	30.6		ug/L		102	84 - 122	1	20
4-Isopropyltoluene	30.0	29.3		ug/L		98	77 - 125	0	20

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106782/8

Matrix: Water

Analysis Batch: 106782

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
Methylene Chloride	30.0	33.3		ug/L		111	75 - 125	2	22	
4-Methyl-2-pentanone (MIBK)	300	311		ug/L		104	67 - 134	0	20	
Methyl tert-butyl ether	30.0	35.3		ug/L		118	73 - 122	1	20	
m-Xylene & p-Xylene	60.0	61.5		ug/L		103	86 - 123	2	20	
n-Butylbenzene	30.0	28.5		ug/L		95	78 - 124	2	20	
N-Propylbenzene	30.0	29.3		ug/L		98	84 - 120	1	20	
o-Xylene	30.0	30.3		ug/L		101	85 - 123	2	20	
sec-Butylbenzene	30.0	28.3		ug/L		94	78 - 125	4	20	
Styrene	30.0	30.9		ug/L		103	86 - 121	2	20	
tert-Butylbenzene	30.0	29.0		ug/L		97	72 - 126	4	20	
1,1,1,2-Tetrachloroethane	30.0	33.6		ug/L		112	80 - 118	2	20	
1,1,2,2-Tetrachloroethane	30.0	30.7		ug/L		102	78 - 118	1	20	
Tetrachloroethene	30.0	29.2		ug/L		97	81 - 126	2	20	
Toluene	30.0	33.2		ug/L		111	82 - 122	2	20	
trans-1,2-Dichloroethene	30.0	35.4		ug/L		118	77 - 128	1	22	
trans-1,3-Dichloropropene	30.0	34.0		ug/L		113	76 - 122	3	20	
1,2,3-Trichlorobenzene	30.0	27.6		ug/L		92	64 - 128	3	30	
1,2,4-Trichlorobenzene	30.0	28.1		ug/L		94	67 - 127	3	40	
1,1,1-Trichloroethane	30.0	35.8		ug/L		119	85 - 122	4	20	
1,1,2-Trichloroethane	30.0	33.5		ug/L		112	76 - 122	1	20	
Trichloroethene	30.0	33.0		ug/L		110	82 - 121	1	20	
Trichlorofluoromethane	30.0	34.4		ug/L		115	84 - 139	4	20	
1,2,3-Trichloropropane	30.0	31.1		ug/L		104	79 - 128	1	20	
1,2,4-Trimethylbenzene	30.0	30.7		ug/L		102	76 - 125	1	20	
1,3,5-Trimethylbenzene	30.0	31.0		ug/L		103	76 - 125	2	20	
Vinyl chloride	30.0	32.2		ug/L		107	70 - 139	2	20	
Xylenes, Total	90.0	91.9		ug/L		102	86 - 123	2	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	99		87 - 114
Dibromofluoromethane	105		81 - 113
Toluene-d8 (Surr)	103		87 - 112

Lab Sample ID: MB 640-106814/5

Matrix: Water

Analysis Batch: 106814

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	2.8	U	25	2.8	ug/L		12/30/13 15:56	1	
Benzene	0.13	U	1.0	0.13	ug/L		12/30/13 15:56	1	
Bromobenzene	0.44	U	1.0	0.44	ug/L		12/30/13 15:56	1	
Bromoform	0.18	U	1.0	0.18	ug/L		12/30/13 15:56	1	
Bromomethane	0.51	U	1.0	0.51	ug/L		12/30/13 15:56	1	
2-Butanone (MEK)	2.6	U	10	2.6	ug/L		12/30/13 15:56	1	
Carbon disulfide	0.23	U	1.0	0.23	ug/L		12/30/13 15:56	1	
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L		12/30/13 15:56	1	
Chlorobenzene	0.13	U	1.0	0.13	ug/L		12/30/13 15:56	1	
Chlorobromomethane	0.21	U	1.0	0.21	ug/L		12/30/13 15:56	1	

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: MB 640-106814/5

Matrix: Water

Analysis Batch: 106814

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:56	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/30/13 15:56	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/30/13 15:56	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/30/13 15:56	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/30/13 15:56	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/30/13 15:56	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/30/13 15:56	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:56	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/30/13 15:56	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:56	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/30/13 15:56	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:56	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/30/13 15:56	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/30/13 15:56	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/30/13 15:56	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:56	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/30/13 15:56	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/30/13 15:56	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/30/13 15:56	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/30/13 15:56	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/30/13 15:56	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/30/13 15:56	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/30/13 15:56	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/30/13 15:56	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/30/13 15:56	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/30/13 15:56	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/30/13 15:56	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/30/13 15:56	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/30/13 15:56	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/30/13 15:56	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/30/13 15:56	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/30/13 15:56	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/30/13 15:56	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 15:56	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/30/13 15:56	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/30/13 15:56	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/30/13 15:56	1
Styrene	0.12	U	1.0	0.12	ug/L			12/30/13 15:56	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/30/13 15:56	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/30/13 15:56	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/30/13 15:56	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/30/13 15:56	1
Toluene	0.14	U	1.0	0.14	ug/L			12/30/13 15:56	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/30/13 15:56	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/30/13 15:56	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/30/13 15:56	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/30/13 15:56	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/30/13 15:56	1

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: MB 640-106814/5

Matrix: Water

Analysis Batch: 106814

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/30/13 15:56	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/30/13 15:56	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/30/13 15:56	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/30/13 15:56	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/30/13 15:56	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/30/13 15:56	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/30/13 15:56	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/30/13 15:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		87 - 114		12/30/13 15:56	1
Dibromofluoromethane	104		81 - 113		12/30/13 15:56	1
Toluene-d8 (Surr)	98		87 - 112		12/30/13 15:56	1

Lab Sample ID: LCS 640-106814/3

Matrix: Water

Analysis Batch: 106814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	328		ug/L		109	64 - 132
Benzene	30.0	31.0		ug/L		103	80 - 120
Bromobenzene	30.0	30.6		ug/L		102	83 - 119
Bromoform	30.0	28.7		ug/L		96	64 - 132
Bromomethane	30.0	59.0	J3 L	ug/L		197	37 - 146
2-Butanone (MEK)	300	305		ug/L		102	66 - 132
Carbon disulfide	30.0	32.0		ug/L		107	72 - 132
Carbon tetrachloride	30.0	26.5		ug/L		88	79 - 126
Chlorobenzene	30.0	30.2		ug/L		101	82 - 116
Chlorobromomethane	30.0	32.4		ug/L		108	72 - 124
Chlorodibromomethane	30.0	29.1		ug/L		97	73 - 125
Chloroethane	30.0	30.9		ug/L		103	47 - 160
Chloroform	30.0	31.0		ug/L		103	81 - 120
Chloromethane	30.0	34.4		ug/L		115	61 - 136
2-Chlorotoluene	30.0	29.5		ug/L		98	83 - 116
4-Chlorotoluene	30.0	29.4		ug/L		98	79 - 118
cis-1,2-Dichloroethene	30.0	31.5		ug/L		105	75 - 128
cis-1,3-Dichloropropene	30.0	28.7		ug/L		96	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	25.5		ug/L		85	57 - 128
Dibromomethane	30.0	30.6		ug/L		102	80 - 119
1,2-Dichlorobenzene	30.0	29.5		ug/L		98	83 - 122
1,3-Dichlorobenzene	30.0	30.2		ug/L		101	85 - 119
1,4-Dichlorobenzene	30.0	29.5		ug/L		98	82 - 119
Dichlorobromomethane	30.0	28.8		ug/L		96	82 - 120
Dichlorodifluoromethane	30.0	32.4		ug/L		108	57 - 170
1,1-Dichloroethane	30.0	30.9		ug/L		103	78 - 124
1,2-Dichloroethane	30.0	29.7		ug/L		99	82 - 123
1,1-Dichloroethene	30.0	31.3		ug/L		104	72 - 133
1,2-Dichloroethene, Total	60.0	63.4		ug/L		106	77 - 127

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCS 640-106814/3

Matrix: Water

Analysis Batch: 106814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	30.0	30.1		ug/L		100	78 - 121
1,3-Dichloropropane	30.0	30.3		ug/L		101	70 - 124
2,2-Dichloropropane	30.0	27.6		ug/L		92	76 - 132
1,1-Dichloropropene	30.0	30.4		ug/L		101	84 - 123
Ethylbenzene	30.0	30.1		ug/L		100	85 - 119
Ethylene Dibromide	30.0	29.5		ug/L		98	78 - 120
Hexachlorobutadiene	30.0	28.6		ug/L		95	75 - 131
2-Hexanone	300	290		ug/L		97	54 - 132
Isopropylbenzene	30.0	30.1		ug/L		100	84 - 122
4-Isopropyltoluene	30.0	30.2		ug/L		101	77 - 125
Methylene Chloride	30.0	31.3		ug/L		104	75 - 125
4-Methyl-2-pentanone (MIBK)	300	291		ug/L		97	67 - 134
Methyl tert-butyl ether	30.0	29.6		ug/L		99	73 - 122
m-Xylene & p-Xylene	60.0	60.8		ug/L		101	86 - 123
n-Butylbenzene	30.0	30.8		ug/L		103	78 - 124
N-Propylbenzene	30.0	30.6		ug/L		102	84 - 120
o-Xylene	30.0	30.3		ug/L		101	85 - 123
sec-Butylbenzene	30.0	30.8		ug/L		103	78 - 125
Styrene	30.0	30.6		ug/L		102	86 - 121
tert-Butylbenzene	30.0	30.1		ug/L		100	72 - 126
1,1,1,2-Tetrachloroethane	30.0	27.8		ug/L		93	80 - 118
1,1,2,2-Tetrachloroethane	30.0	29.3		ug/L		98	78 - 118
Tetrachloroethene	30.0	29.2		ug/L		97	81 - 126
Toluene	30.0	29.9		ug/L		100	82 - 122
trans-1,2-Dichloroethene	30.0	31.9		ug/L		106	77 - 128
trans-1,3-Dichloropropene	30.0	26.8		ug/L		89	76 - 122
1,2,3-Trichlorobenzene	30.0	29.3		ug/L		98	64 - 128
1,2,4-Trichlorobenzene	30.0	28.2		ug/L		94	67 - 127
1,1,1-Trichloroethane	30.0	28.4		ug/L		95	85 - 122
1,1,2-Trichloroethane	30.0	30.0		ug/L		100	76 - 122
Trichloroethene	30.0	30.5		ug/L		102	82 - 121
Trichlorofluoromethane	30.0	38.1		ug/L		127	84 - 139
1,2,3-Trichloropropane	30.0	28.4		ug/L		95	79 - 128
1,2,4-Trimethylbenzene	30.0	30.6		ug/L		102	76 - 125
1,3,5-Trimethylbenzene	30.0	30.5		ug/L		102	76 - 125
Vinyl chloride	30.0	36.3		ug/L		121	70 - 139
Xylenes, Total	90.0	91.1		ug/L		101	86 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		87 - 114
Dibromofluoromethane	102		81 - 113
Toluene-d8 (Surr)	99		87 - 112

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106814/4

Matrix: Water

Analysis Batch: 106814

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
Acetone	300	325		ug/L		108	64 - 132	1	28
Benzene	30.0	30.0		ug/L		100	80 - 120	3	20
Bromobenzene	30.0	29.6		ug/L		99	83 - 119	3	20
Bromoform	30.0	26.3		ug/L		88	64 - 132	9	20
Bromomethane	30.0	56.4	J3 L	ug/L		188	37 - 146	4	38
2-Butanone (MEK)	300	295		ug/L		98	66 - 132	3	28
Carbon disulfide	30.0	31.5		ug/L		105	72 - 132	1	23
Carbon tetrachloride	30.0	26.0		ug/L		87	79 - 126	2	20
Chlorobenzene	30.0	28.9		ug/L		96	82 - 116	5	20
Chlorobromomethane	30.0	32.8		ug/L		109	72 - 124	1	20
Chlorodibromomethane	30.0	27.9		ug/L		93	73 - 125	4	20
Chloroethane	30.0	31.1		ug/L		104	47 - 160	1	35
Chloroform	30.0	30.5		ug/L		102	81 - 120	2	20
Chloromethane	30.0	33.3		ug/L		111	61 - 136	3	20
2-Chlorotoluene	30.0	28.5		ug/L		95	83 - 116	4	20
4-Chlorotoluene	30.0	28.2		ug/L		94	79 - 118	4	20
cis-1,2-Dichloroethene	30.0	31.6		ug/L		105	75 - 128	0	20
cis-1,3-Dichloropropene	30.0	28.2		ug/L		94	79 - 120	2	20
1,2-Dibromo-3-Chloropropane	30.0	24.3		ug/L		81	57 - 128	5	25
Dibromomethane	30.0	29.3		ug/L		98	80 - 119	4	20
1,2-Dichlorobenzene	30.0	28.2		ug/L		94	83 - 122	5	20
1,3-Dichlorobenzene	30.0	29.1		ug/L		97	85 - 119	4	20
1,4-Dichlorobenzene	30.0	28.0		ug/L		93	82 - 119	5	20
Dichlorobromomethane	30.0	28.7		ug/L		96	82 - 120	1	20
Dichlorodifluoromethane	30.0	31.5		ug/L		105	57 - 170	3	39
1,1-Dichloroethane	30.0	31.0		ug/L		103	78 - 124	0	20
1,2-Dichloroethane	30.0	28.9		ug/L		96	82 - 123	3	20
1,1-Dichloroethene	30.0	31.7		ug/L		106	72 - 133	1	24
1,2-Dichloroethene, Total	60.0	63.8		ug/L		106	77 - 127	1	20
1,2-Dichloropropane	30.0	30.3		ug/L		101	78 - 121	0	20
1,3-Dichloropropane	30.0	29.4		ug/L		98	70 - 124	3	20
2,2-Dichloropropane	30.0	27.4		ug/L		91	76 - 132	1	20
1,1-Dichloropropene	30.0	30.7		ug/L		102	84 - 123	1	20
Ethylbenzene	30.0	29.1		ug/L		97	85 - 119	3	20
Ethylene Dibromide	30.0	28.9		ug/L		96	78 - 120	2	20
Hexachlorobutadiene	30.0	28.5		ug/L		95	75 - 131	0	24
2-Hexanone	300	279		ug/L		93	54 - 132	4	32
Isopropylbenzene	30.0	28.6		ug/L		95	84 - 122	5	20
4-Isopropyltoluene	30.0	29.6		ug/L		99	77 - 125	2	20
Methylene Chloride	30.0	31.3		ug/L		104	75 - 125	0	22
4-Methyl-2-pentanone (MIBK)	300	281		ug/L		94	67 - 134	3	20
Methyl tert-butyl ether	30.0	29.6		ug/L		99	73 - 122	0	20
m-Xylene & p-Xylene	60.0	58.8		ug/L		98	86 - 123	4	20
n-Butylbenzene	30.0	29.3		ug/L		98	78 - 124	5	20
N-Propylbenzene	30.0	29.4		ug/L		98	84 - 120	4	20
o-Xylene	30.0	29.2		ug/L		97	85 - 123	4	20
sec-Butylbenzene	30.0	29.7		ug/L		99	78 - 125	4	20
Styrene	30.0	29.4		ug/L		98	86 - 121	4	20

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106814/4

Matrix: Water

Analysis Batch: 106814

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
							RPD	Limit		
tert-Butylbenzene	30.0	29.1		ug/L		97	72 - 126	4	20	
1,1,1,2-Tetrachloroethane	30.0	26.1		ug/L		87	80 - 118	6	20	
1,1,2,2-Tetrachloroethane	30.0	27.7		ug/L		92	78 - 118	6	20	
Tetrachloroethene	30.0	28.9		ug/L		96	81 - 126	1	20	
Toluene	30.0	29.2		ug/L		97	82 - 122	3	20	
trans-1,2-Dichloroethene	30.0	32.2		ug/L		107	77 - 128	1	22	
trans-1,3-Dichloropropene	30.0	25.3		ug/L		84	76 - 122	6	20	
1,2,3-Trichlorobenzene	30.0	28.8		ug/L		96	64 - 128	2	30	
1,2,4-Trichlorobenzene	30.0	27.7		ug/L		92	67 - 127	2	40	
1,1,1-Trichloroethane	30.0	27.8		ug/L		93	85 - 122	2	20	
1,1,2-Trichloroethane	30.0	28.9		ug/L		96	76 - 122	4	20	
Trichloroethene	30.0	29.5		ug/L		98	82 - 121	3	20	
Trichlorofluoromethane	30.0	36.7		ug/L		122	84 - 139	4	20	
1,2,3-Trichloropropane	30.0	27.7		ug/L		92	79 - 128	2	20	
1,2,4-Trimethylbenzene	30.0	29.7		ug/L		99	76 - 125	3	20	
1,3,5-Trimethylbenzene	30.0	29.3		ug/L		98	76 - 125	4	20	
Vinyl chloride	30.0	35.1		ug/L		117	70 - 139	3	20	
Xylenes, Total	90.0	87.9		ug/L		98	86 - 123	4	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		87 - 114
Dibromofluoromethane	105		81 - 113
Toluene-d8 (Surr)	100		87 - 112

Lab Sample ID: MB 640-106825/5

Matrix: Water

Analysis Batch: 106825

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	2.8	U	25	2.8	ug/L			12/31/13 12:30	1
Benzene	0.13	U	1.0	0.13	ug/L			12/31/13 12:30	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/31/13 12:30	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/31/13 12:30	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/31/13 12:30	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/31/13 12:30	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/31/13 12:30	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			12/31/13 12:30	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/31/13 12:30	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/31/13 12:30	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/31/13 12:30	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/31/13 12:30	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/31/13 12:30	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/31/13 12:30	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/31/13 12:30	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/31/13 12:30	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/31/13 12:30	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/31/13 12:30	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/31/13 12:30	1

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: MB 640-106825/5

Matrix: Water

Analysis Batch: 106825

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:30	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/31/13 12:30	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/31/13 12:30	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/31/13 12:30	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/31/13 12:30	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/31/13 12:30	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:30	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/31/13 12:30	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/31/13 12:30	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/31/13 12:30	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/31/13 12:30	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/31/13 12:30	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/31/13 12:30	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/31/13 12:30	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/31/13 12:30	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/31/13 12:30	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/31/13 12:30	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/31/13 12:30	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/31/13 12:30	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/31/13 12:30	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/31/13 12:30	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/31/13 12:30	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/31/13 12:30	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/31/13 12:30	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/31/13 12:30	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/31/13 12:30	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/31/13 12:30	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/31/13 12:30	1
Styrene	0.12	U	1.0	0.12	ug/L			12/31/13 12:30	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/31/13 12:30	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/31/13 12:30	1
1,1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/31/13 12:30	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/31/13 12:30	1
Toluene	0.14	U	1.0	0.14	ug/L			12/31/13 12:30	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/31/13 12:30	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/31/13 12:30	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/31/13 12:30	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/31/13 12:30	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/31/13 12:30	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:30	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/31/13 12:30	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/31/13 12:30	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/31/13 12:30	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/31/13 12:30	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/31/13 12:30	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/31/13 12:30	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/31/13 12:30	1

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: MB 640-106825/5

Matrix: Water

Analysis Batch: 106825

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	92		87 - 114		12/31/13 12:30	1
Dibromofluoromethane	100		81 - 113		12/31/13 12:30	1
Toluene-d8 (Surr)	99		87 - 112		12/31/13 12:30	1

Lab Sample ID: LCS 640-106825/3

Matrix: Water

Analysis Batch: 106825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
Acetone	300	290		ug/L		97	64 - 132
Benzene	30.0	28.3		ug/L		94	80 - 120
Bromobenzene	30.0	27.1		ug/L		90	83 - 119
Bromoform	30.0	25.7		ug/L		86	64 - 132
Bromomethane	30.0	59.7	J3 L	ug/L		199	37 - 146
2-Butanone (MEK)	300	268		ug/L		89	66 - 132
Carbon disulfide	30.0	28.4		ug/L		95	72 - 132
Carbon tetrachloride	30.0	25.1		ug/L		84	79 - 126
Chlorobenzene	30.0	27.9		ug/L		93	82 - 116
Chlorobromomethane	30.0	30.8		ug/L		103	72 - 124
Chlorodibromomethane	30.0	26.3		ug/L		88	73 - 125
Chloroethane	30.0	31.2		ug/L		104	47 - 160
Chloroform	30.0	28.9		ug/L		96	81 - 120
Chloromethane	30.0	32.7		ug/L		109	61 - 136
2-Chlorotoluene	30.0	26.9		ug/L		90	83 - 116
4-Chlorotoluene	30.0	27.4		ug/L		91	79 - 118
cis-1,2-Dichloroethene	30.0	29.2		ug/L		97	75 - 128
cis-1,3-Dichloropropene	30.0	26.6		ug/L		89	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	23.0		ug/L		77	57 - 128
Dibromomethane	30.0	27.8		ug/L		93	80 - 119
1,2-Dichlorobenzene	30.0	27.4		ug/L		91	83 - 122
1,3-Dichlorobenzene	30.0	28.3		ug/L		94	85 - 119
1,4-Dichlorobenzene	30.0	27.3		ug/L		91	82 - 119
Dichlorobromomethane	30.0	26.9		ug/L		90	82 - 120
Dichlorodifluoromethane	30.0	31.7		ug/L		106	57 - 170
1,1-Dichloroethane	30.0	29.1		ug/L		97	78 - 124
1,2-Dichloroethane	30.0	27.1		ug/L		90	82 - 123
1,1-Dichloroethene	30.0	28.5		ug/L		95	72 - 133
1,2-Dichloroethene, Total	60.0	58.2		ug/L		97	77 - 127
1,2-Dichloropropane	30.0	28.7		ug/L		96	78 - 121
1,3-Dichloropropane	30.0	28.2		ug/L		94	70 - 124
2,2-Dichloropropane	30.0	26.8		ug/L		89	76 - 132
1,1-Dichloropropene	30.0	28.5		ug/L		95	84 - 123
Ethylbenzene	30.0	27.8		ug/L		93	85 - 119
Ethylene Dibromide	30.0	27.3		ug/L		91	78 - 120
Hexachlorobutadiene	30.0	26.5		ug/L		88	75 - 131
2-Hexanone	300	260		ug/L		87	54 - 132
Isopropylbenzene	30.0	27.5		ug/L		92	84 - 122
4-Isopropyltoluene	30.0	28.2		ug/L		94	77 - 125

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCS 640-106825/3

Matrix: Water

Analysis Batch: 106825

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	30.0	28.6		ug/L		95	75 - 125
4-Methyl-2-pentanone (MIBK)	300	257		ug/L		86	67 - 134
Methyl tert-butyl ether	30.0	27.3		ug/L		91	73 - 122
m-Xylene & p-Xylene	60.0	56.7		ug/L		95	86 - 123
n-Butylbenzene	30.0	27.9		ug/L		93	78 - 124
N-Propylbenzene	30.0	28.0		ug/L		93	84 - 120
o-Xylene	30.0	27.7		ug/L		92	85 - 123
sec-Butylbenzene	30.0	28.4		ug/L		95	78 - 125
Styrene	30.0	27.6		ug/L		92	86 - 121
tert-Butylbenzene	30.0	27.4		ug/L		91	72 - 126
1,1,1,2-Tetrachloroethane	30.0	25.4		ug/L		85	80 - 118
1,1,1,2-Tetrachloroethane	30.0	26.3		ug/L		88	78 - 118
Tetrachloroethene	30.0	27.1		ug/L		90	81 - 126
Toluene	30.0	27.8		ug/L		93	82 - 122
trans-1,2-Dichloroethene	30.0	29.0		ug/L		97	77 - 128
trans-1,3-Dichloropropene	30.0	25.0		ug/L		83	76 - 122
1,2,3-Trichlorobenzene	30.0	26.3		ug/L		88	64 - 128
1,2,4-Trichlorobenzene	30.0	26.4		ug/L		88	67 - 127
1,1,1-Trichloroethane	30.0	26.0		ug/L		87	85 - 122
1,1,2-Trichloroethane	30.0	27.9		ug/L		93	76 - 122
Trichloroethene	30.0	27.7		ug/L		92	82 - 121
Trichlorofluoromethane	30.0	35.8		ug/L		119	84 - 139
1,2,3-Trichloropropane	30.0	26.7		ug/L		89	79 - 128
1,2,4-Trimethylbenzene	30.0	27.7		ug/L		92	76 - 125
1,3,5-Trimethylbenzene	30.0	27.5		ug/L		92	76 - 125
Vinyl chloride	30.0	34.3		ug/L		114	70 - 139
Xylenes, Total	90.0	84.4		ug/L		94	86 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		87 - 114
Dibromofluoromethane	104		81 - 113
Toluene-d8 (Surr)	101		87 - 112

Lab Sample ID: LCSD 640-106825/4

Matrix: Water

Analysis Batch: 106825

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
Acetone	300	274		ug/L		91	64 - 132	6	28
Benzene	30.0	28.6		ug/L		95	80 - 120	1	20
Bromobenzene	30.0	27.8		ug/L		93	83 - 119	3	20
Bromoform	30.0	24.3		ug/L		81	64 - 132	6	20
Bromomethane	30.0	63.0	J3 L	ug/L		210	37 - 146	5	38
2-Butanone (MEK)	300	267		ug/L		89	66 - 132	0	28
Carbon disulfide	30.0	28.9		ug/L		96	72 - 132	2	23
Carbon tetrachloride	30.0	24.7		ug/L		82	79 - 126	2	20
Chlorobenzene	30.0	27.9		ug/L		93	82 - 116	0	20
Chlorobromomethane	30.0	31.1		ug/L		104	72 - 124	1	20

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106825/4

Matrix: Water

Analysis Batch: 106825

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
Chlorodibromomethane	30.0	26.1		ug/L		87	73 - 125	1	20
Chloroethane	30.0	31.4		ug/L		105	47 - 160	1	35
Chloroform	30.0	29.9		ug/L		100	81 - 120	3	20
Chloromethane	30.0	31.4		ug/L		105	61 - 136	4	20
2-Chlorotoluene	30.0	26.8		ug/L		89	83 - 116	0	20
4-Chlorotoluene	30.0	26.9		ug/L		90	79 - 118	2	20
cis-1,2-Dichloroethene	30.0	30.3		ug/L		101	75 - 128	4	20
cis-1,3-Dichloropropene	30.0	26.8		ug/L		89	79 - 120	0	20
1,2-Dibromo-3-Chloropropane	30.0	23.7		ug/L		79	57 - 128	3	25
Dibromomethane	30.0	27.7		ug/L		92	80 - 119	0	20
1,2-Dichlorobenzene	30.0	28.1		ug/L		94	83 - 122	2	20
1,3-Dichlorobenzene	30.0	29.2		ug/L		97	85 - 119	3	20
1,4-Dichlorobenzene	30.0	28.1		ug/L		94	82 - 119	3	20
Dichlorobromomethane	30.0	26.5		ug/L		88	82 - 120	2	20
Dichlorodifluoromethane	30.0	29.2		ug/L		97	57 - 170	8	39
1,1-Dichloroethane	30.0	29.9		ug/L		100	78 - 124	3	20
1,2-Dichloroethane	30.0	27.1		ug/L		90	82 - 123	0	20
1,1-Dichloroethene	30.0	29.3		ug/L		98	72 - 133	3	24
1,2-Dichloroethene, Total	60.0	60.8		ug/L		101	77 - 127	4	20
1,2-Dichloropropane	30.0	27.9		ug/L		93	78 - 121	3	20
1,3-Dichloropropane	30.0	28.3		ug/L		94	70 - 124	0	20
2,2-Dichloropropane	30.0	28.0		ug/L		93	76 - 132	4	20
1,1-Dichloropropene	30.0	28.5		ug/L		95	84 - 123	0	20
Ethylbenzene	30.0	28.2		ug/L		94	85 - 119	1	20
Ethylene Dibromide	30.0	27.1		ug/L		90	78 - 120	0	20
Hexachlorobutadiene	30.0	28.2		ug/L		94	75 - 131	6	24
2-Hexanone	300	252		ug/L		84	54 - 132	3	32
Isopropylbenzene	30.0	27.6		ug/L		92	84 - 122	1	20
4-Isopropyltoluene	30.0	29.4		ug/L		98	77 - 125	4	20
Methylene Chloride	30.0	29.6		ug/L		99	75 - 125	3	22
4-Methyl-2-pentanone (MIBK)	300	252		ug/L		84	67 - 134	2	20
Methyl tert-butyl ether	30.0	28.1		ug/L		94	73 - 122	3	20
m-Xylene & p-Xylene	60.0	56.6		ug/L		94	86 - 123	0	20
n-Butylbenzene	30.0	29.4		ug/L		98	78 - 124	5	20
N-Propylbenzene	30.0	27.9		ug/L		93	84 - 120	0	20
o-Xylene	30.0	27.9		ug/L		93	85 - 123	1	20
sec-Butylbenzene	30.0	29.3		ug/L		98	78 - 125	3	20
Styrene	30.0	28.2		ug/L		94	86 - 121	2	20
tert-Butylbenzene	30.0	27.9		ug/L		93	72 - 126	2	20
1,1,1,2-Tetrachloroethane	30.0	25.5		ug/L		85	80 - 118	1	20
1,1,2,2-Tetrachloroethane	30.0	25.8		ug/L		86	78 - 118	2	20
Tetrachloroethene	30.0	27.7		ug/L		92	81 - 126	2	20
Toluene	30.0	28.3		ug/L		94	82 - 122	2	20
trans-1,2-Dichloroethene	30.0	30.5		ug/L		102	77 - 128	5	22
trans-1,3-Dichloropropene	30.0	24.9		ug/L		83	76 - 122	0	20
1,2,3-Trichlorobenzene	30.0	26.7		ug/L		89	64 - 128	2	30
1,2,4-Trichlorobenzene	30.0	26.5		ug/L		88	67 - 127	1	40
1,1,1-Trichloroethane	30.0	26.5		ug/L		88	85 - 122	2	20

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106825/4

Matrix: Water

Analysis Batch: 106825

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
1,1,2-Trichloroethane	30.0	27.3		ug/L		91	76 - 122	2	20	
Trichloroethene	30.0	27.8		ug/L		93	82 - 121	0	20	
Trichlorofluoromethane	30.0	34.5		ug/L		115	84 - 139	4	20	
1,2,3-Trichloropropane	30.0	25.0		ug/L		83	79 - 128	7	20	
1,2,4-Trimethylbenzene	30.0	27.9		ug/L		93	76 - 125	1	20	
1,3,5-Trimethylbenzene	30.0	27.9		ug/L		93	76 - 125	1	20	
Vinyl chloride	30.0	32.8		ug/L		109	70 - 139	4	20	
Xylenes, Total	90.0	84.5		ug/L		94	86 - 123	0	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		87 - 114
Dibromofluoromethane	107		81 - 113
Toluene-d8 (Surr)	100		87 - 112

Lab Sample ID: MB 640-106827/5

Matrix: Water

Analysis Batch: 106827

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	2.8	U	25	2.8	ug/L			12/31/13 12:41	1
Benzene	0.13	U	1.0	0.13	ug/L			12/31/13 12:41	1
Bromobenzene	0.44	U	1.0	0.44	ug/L			12/31/13 12:41	1
Bromoform	0.18	U	1.0	0.18	ug/L			12/31/13 12:41	1
Bromomethane	0.51	U	1.0	0.51	ug/L			12/31/13 12:41	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			12/31/13 12:41	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			12/31/13 12:41	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			12/31/13 12:41	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			12/31/13 12:41	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			12/31/13 12:41	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			12/31/13 12:41	1
Chloroethane	0.33	U	1.0	0.33	ug/L			12/31/13 12:41	1
Chloroform	0.12	U	1.0	0.12	ug/L			12/31/13 12:41	1
Chloromethane	0.18	U	1.0	0.18	ug/L			12/31/13 12:41	1
2-Chlorotoluene	0.18	U	1.0	0.18	ug/L			12/31/13 12:41	1
4-Chlorotoluene	0.15	U	1.0	0.15	ug/L			12/31/13 12:41	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			12/31/13 12:41	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/31/13 12:41	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			12/31/13 12:41	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:41	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			12/31/13 12:41	1
1,3-Dichlorobenzene	0.17	U	1.0	0.17	ug/L			12/31/13 12:41	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			12/31/13 12:41	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			12/31/13 12:41	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			12/31/13 12:41	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:41	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			12/31/13 12:41	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			12/31/13 12:41	1
1,2-Dichloroethene, Total	0.44	U	1.0	0.44	ug/L			12/31/13 12:41	1

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: MB 640-106827/5

Matrix: Water

Analysis Batch: 106827

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			12/31/13 12:41	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			12/31/13 12:41	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			12/31/13 12:41	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			12/31/13 12:41	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			12/31/13 12:41	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			12/31/13 12:41	1
Hexachlorobutadiene	0.33	U	1.0	0.33	ug/L			12/31/13 12:41	1
2-Hexanone	1.0	U	10	1.0	ug/L			12/31/13 12:41	1
Isopropylbenzene	0.15	U	1.0	0.15	ug/L			12/31/13 12:41	1
4-Isopropyltoluene	0.16	U	1.0	0.16	ug/L			12/31/13 12:41	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			12/31/13 12:41	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			12/31/13 12:41	1
Methyl tert-butyl ether	0.13	U	1.0	0.13	ug/L			12/31/13 12:41	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			12/31/13 12:41	1
n-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/31/13 12:41	1
N-Propylbenzene	0.20	U	1.0	0.20	ug/L			12/31/13 12:41	1
o-Xylene	0.15	U	1.0	0.15	ug/L			12/31/13 12:41	1
sec-Butylbenzene	0.21	U	1.0	0.21	ug/L			12/31/13 12:41	1
Styrene	0.12	U	1.0	0.12	ug/L			12/31/13 12:41	1
tert-Butylbenzene	0.18	U	1.0	0.18	ug/L			12/31/13 12:41	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			12/31/13 12:41	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			12/31/13 12:41	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			12/31/13 12:41	1
Toluene	0.14	U	1.0	0.14	ug/L			12/31/13 12:41	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			12/31/13 12:41	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			12/31/13 12:41	1
1,2,3-Trichlorobenzene	0.19	U	1.0	0.19	ug/L			12/31/13 12:41	1
1,2,4-Trichlorobenzene	0.16	U	1.0	0.16	ug/L			12/31/13 12:41	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			12/31/13 12:41	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			12/31/13 12:41	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			12/31/13 12:41	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			12/31/13 12:41	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			12/31/13 12:41	1
1,2,4-Trimethylbenzene	0.14	U	1.0	0.14	ug/L			12/31/13 12:41	1
1,3,5-Trimethylbenzene	0.17	U	1.0	0.17	ug/L			12/31/13 12:41	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			12/31/13 12:41	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			12/31/13 12:41	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	98		87 - 114		12/31/13 12:41	1
Dibromofluoromethane	103		81 - 113		12/31/13 12:41	1
Toluene-d8 (Surr)	108		87 - 112		12/31/13 12:41	1

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCS 640-106827/3

Matrix: Water

Analysis Batch: 106827

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	318		ug/L		106	64 - 132
Benzene	30.0	30.9		ug/L		103	80 - 120
Bromobenzene	30.0	27.2		ug/L		91	83 - 119
Bromoform	30.0	30.3		ug/L		101	64 - 132
Bromomethane	30.0	31.8	L	ug/L		106	37 - 146
2-Butanone (MEK)	300	311		ug/L		104	66 - 132
Carbon disulfide	30.0	34.1		ug/L		114	72 - 132
Carbon tetrachloride	30.0	37.7		ug/L		126	79 - 126
Chlorobenzene	30.0	27.2		ug/L		91	82 - 116
Chlorobromomethane	30.0	32.6		ug/L		109	72 - 124
Chlorodibromomethane	30.0	28.8		ug/L		96	73 - 125
Chloroethane	30.0	42.8		ug/L		143	47 - 160
Chloroform	30.0	32.3		ug/L		108	81 - 120
Chloromethane	30.0	35.2		ug/L		117	61 - 136
2-Chlorotoluene	30.0	27.9		ug/L		93	83 - 116
4-Chlorotoluene	30.0	28.4		ug/L		95	79 - 118
cis-1,2-Dichloroethene	30.0	32.9		ug/L		110	75 - 128
cis-1,3-Dichloropropene	30.0	32.2		ug/L		107	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	26.8		ug/L		89	57 - 128
Dibromomethane	30.0	29.4		ug/L		98	80 - 119
1,2-Dichlorobenzene	30.0	25.1		ug/L		84	83 - 122
1,3-Dichlorobenzene	30.0	26.2		ug/L		87	85 - 119
1,4-Dichlorobenzene	30.0	25.0		ug/L		83	82 - 119
Dichlorobromomethane	30.0	31.8		ug/L		106	82 - 120
Dichlorodifluoromethane	30.0	39.4		ug/L		131	57 - 170
1,1-Dichloroethane	30.0	31.7		ug/L		106	78 - 124
1,2-Dichloroethane	30.0	28.3		ug/L		94	82 - 123
1,1-Dichloroethene	30.0	33.4		ug/L		111	72 - 133
1,2-Dichloroethene, Total	60.0	65.4		ug/L		109	77 - 127
1,2-Dichloropropane	30.0	29.4		ug/L		98	78 - 121
1,3-Dichloropropane	30.0	29.4		ug/L		98	70 - 124
2,2-Dichloropropane	30.0	33.5		ug/L		112	76 - 132
1,1-Dichloropropene	30.0	32.1		ug/L		107	84 - 123
Ethylbenzene	30.0	27.8		ug/L		93	85 - 119
Ethylene Dibromide	30.0	31.0		ug/L		103	78 - 120
Hexachlorobutadiene	30.0	26.9		ug/L		90	75 - 131
2-Hexanone	300	272		ug/L		91	54 - 132
Isopropylbenzene	30.0	29.3		ug/L		98	84 - 122
4-Isopropyltoluene	30.0	27.9		ug/L		93	77 - 125
Methylene Chloride	30.0	30.3		ug/L		101	75 - 125
4-Methyl-2-pentanone (MIBK)	300	279		ug/L		93	67 - 134
Methyl tert-butyl ether	30.0	31.2		ug/L		104	73 - 122
m-Xylene & p-Xylene	60.0	56.8		ug/L		95	86 - 123
n-Butylbenzene	30.0	27.1		ug/L		90	78 - 124
N-Propylbenzene	30.0	28.4		ug/L		95	84 - 120
o-Xylene	30.0	27.7		ug/L		92	85 - 123
sec-Butylbenzene	30.0	27.5		ug/L		92	78 - 125
Styrene	30.0	28.1		ug/L		94	86 - 121

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCS 640-106827/3

Matrix: Water

Analysis Batch: 106827

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	30.0	28.9		ug/L		96	72 - 126
1,1,1,2-Tetrachloroethane	30.0	30.6		ug/L		102	80 - 118
1,1,2,2-Tetrachloroethane	30.0	27.4		ug/L		91	78 - 118
Tetrachloroethene	30.0	28.6		ug/L		95	81 - 126
Toluene	30.0	31.0		ug/L		103	82 - 122
trans-1,2-Dichloroethene	30.0	32.5		ug/L		108	77 - 128
trans-1,3-Dichloropropene	30.0	29.5		ug/L		98	76 - 122
1,2,3-Trichlorobenzene	30.0	24.8		ug/L		83	64 - 128
1,2,4-Trichlorobenzene	30.0	24.0		ug/L		80	67 - 127
1,1,1-Trichloroethane	30.0	33.2		ug/L		111	85 - 122
1,1,2-Trichloroethane	30.0	30.7		ug/L		102	76 - 122
Trichloroethene	30.0	31.4		ug/L		105	82 - 121
Trichlorofluoromethane	30.0	39.6		ug/L		132	84 - 139
1,2,3-Trichloropropane	30.0	27.6		ug/L		92	79 - 128
1,2,4-Trimethylbenzene	30.0	28.1		ug/L		94	76 - 125
1,3,5-Trimethylbenzene	30.0	28.3		ug/L		94	76 - 125
Vinyl chloride	30.0	35.7		ug/L		119	70 - 139
Xylenes, Total	90.0	84.5		ug/L		94	86 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	101		87 - 114
Dibromofluoromethane	104		81 - 113
Toluene-d8 (Surr)	105		87 - 112

Lab Sample ID: LCSD 640-106827/4

Matrix: Water

Analysis Batch: 106827

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
Acetone	300	327		ug/L		109	64 - 132	3	28
Benzene	30.0	32.9		ug/L		110	80 - 120	6	20
Bromobenzene	30.0	29.1		ug/L		97	83 - 119	7	20
Bromoform	30.0	31.7		ug/L		106	64 - 132	5	20
Bromomethane	30.0	33.1	L	ug/L		110	37 - 146	4	38
2-Butanone (MEK)	300	309		ug/L		103	66 - 132	1	28
Carbon disulfide	30.0	37.8		ug/L		126	72 - 132	10	23
Carbon tetrachloride	30.0	40.0	J3	ug/L		133	79 - 126	6	20
Chlorobenzene	30.0	29.1		ug/L		97	82 - 116	7	20
Chlorobromomethane	30.0	34.6		ug/L		115	72 - 124	6	20
Chlorodibromomethane	30.0	30.0		ug/L		100	73 - 125	4	20
Chloroethane	30.0	41.3		ug/L		138	47 - 160	4	35
Chloroform	30.0	35.1		ug/L		117	81 - 120	8	20
Chloromethane	30.0	35.2		ug/L		117	61 - 136	0	20
2-Chlorotoluene	30.0	29.4		ug/L		98	83 - 116	5	20
4-Chlorotoluene	30.0	31.4		ug/L		105	79 - 118	10	20
cis-1,2-Dichloroethene	30.0	36.0		ug/L		120	75 - 128	9	20
cis-1,3-Dichloropropene	30.0	33.6		ug/L		112	79 - 120	4	20
1,2-Dibromo-3-Chloropropane	30.0	29.2		ug/L		97	57 - 128	9	25

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106827/4

Matrix: Water

Analysis Batch: 106827

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
Dibromomethane	30.0	31.1		ug/L		104	80 - 119	6	20
1,2-Dichlorobenzene	30.0	27.5		ug/L		92	83 - 122	9	20
1,3-Dichlorobenzene	30.0	27.6		ug/L		92	85 - 119	5	20
1,4-Dichlorobenzene	30.0	28.5		ug/L		95	82 - 119	13	20
Dichlorobromomethane	30.0	34.3		ug/L		114	82 - 120	8	20
Dichlorodifluoromethane	30.0	40.8		ug/L		136	57 - 170	3	39
1,1-Dichloroethane	30.0	35.1		ug/L		117	78 - 124	10	20
1,2-Dichloroethane	30.0	30.5		ug/L		102	82 - 123	8	20
1,1-Dichloroethene	30.0	36.4		ug/L		121	72 - 133	8	24
1,2-Dichloroethene, Total	60.0	72.3		ug/L		120	77 - 127	10	20
1,2-Dichloropropane	30.0	31.6		ug/L		105	78 - 121	7	20
1,3-Dichloropropane	30.0	31.1		ug/L		104	70 - 124	6	20
2,2-Dichloropropane	30.0	38.3		ug/L		128	76 - 132	13	20
1,1-Dichloropropene	30.0	34.5		ug/L		115	84 - 123	7	20
Ethylbenzene	30.0	30.1		ug/L		100	85 - 119	8	20
Ethylene Dibromide	30.0	32.5		ug/L		108	78 - 120	4	20
Hexachlorobutadiene	30.0	30.2		ug/L		101	75 - 131	12	24
2-Hexanone	300	284		ug/L		95	54 - 132	4	32
Isopropylbenzene	30.0	30.7		ug/L		102	84 - 122	5	20
4-Isopropyltoluene	30.0	30.1		ug/L		100	77 - 125	8	20
Methylene Chloride	30.0	33.3		ug/L		111	75 - 125	10	22
4-Methyl-2-pentanone (MIBK)	300	287		ug/L		96	67 - 134	3	20
Methyl tert-butyl ether	30.0	33.3		ug/L		111	73 - 122	6	20
m-Xylene & p-Xylene	60.0	60.4		ug/L		101	86 - 123	6	20
n-Butylbenzene	30.0	30.3		ug/L		101	78 - 124	11	20
N-Propylbenzene	30.0	31.0		ug/L		103	84 - 120	9	20
o-Xylene	30.0	30.2		ug/L		101	85 - 123	9	20
sec-Butylbenzene	30.0	30.4		ug/L		101	78 - 125	10	20
Styrene	30.0	30.6		ug/L		102	86 - 121	8	20
tert-Butylbenzene	30.0	30.8		ug/L		103	72 - 126	6	20
1,1,1,2-Tetrachloroethane	30.0	32.8		ug/L		109	80 - 118	7	20
1,1,2,2-Tetrachloroethane	30.0	28.7		ug/L		96	78 - 118	5	20
Tetrachloroethene	30.0	30.8		ug/L		103	81 - 126	7	20
Toluene	30.0	33.2		ug/L		111	82 - 122	7	20
trans-1,2-Dichloroethene	30.0	36.3		ug/L		121	77 - 128	11	22
trans-1,3-Dichloropropene	30.0	31.0		ug/L		103	76 - 122	5	20
1,2,3-Trichlorobenzene	30.0	27.5		ug/L		92	64 - 128	11	30
1,2,4-Trichlorobenzene	30.0	27.5		ug/L		92	67 - 127	14	40
1,1,1-Trichloroethane	30.0	35.7		ug/L		119	85 - 122	7	20
1,1,2-Trichloroethane	30.0	32.0		ug/L		107	76 - 122	4	20
Trichloroethene	30.0	33.8		ug/L		113	82 - 121	7	20
Trichlorofluoromethane	30.0	41.3		ug/L		138	84 - 139	4	20
1,2,3-Trichloropropane	30.0	28.5		ug/L		95	79 - 128	3	20
1,2,4-Trimethylbenzene	30.0	30.8		ug/L		103	76 - 125	9	20
1,3,5-Trimethylbenzene	30.0	30.5		ug/L		102	76 - 125	7	20
Vinyl chloride	30.0	37.0		ug/L		123	70 - 139	3	20
Xylenes, Total	90.0	90.7		ug/L		101	86 - 123	7	20

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

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

Lab Sample ID: LCSD 640-106827/4

Matrix: Water

Analysis Batch: 106827

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	102		87 - 114
Dibromofluoromethane	106		81 - 113
Toluene-d8 (Surr)	104		87 - 112

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 640-106657/1-A

Matrix: Water

Analysis Batch: 106665

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 106657

Analyte	MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Acenaphthylene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Benzo[a]anthracene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Benzo[a]pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Benzo[b]fluoranthene	0.025	U	0.10	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Benzo[g,h,i]perylene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Benzo[k]fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Chrysene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Dibenz(a,h)anthracene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Fluoranthene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Fluorene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Indeno[1,2,3-cd]pyrene	0.044	U	0.20	0.044	ug/L		12/21/13 16:29	12/22/13 20:45	1
1-Methylnaphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
2-Methylnaphthalene	0.031	U	0.20	0.031	ug/L		12/21/13 16:29	12/22/13 20:45	1
Naphthalene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Phenanthrene	0.040	U	0.20	0.040	ug/L		12/21/13 16:29	12/22/13 20:45	1
Pyrene	0.025	U	0.20	0.025	ug/L		12/21/13 16:29	12/22/13 20:45	1
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac			
%Recovery	Qualifier								
<i>o</i> -Terphenyl (Surr)	64		40 - 114	12/21/13 16:29	12/22/13 20:45	1			

Lab Sample ID: LCS 640-106657/2-A

Matrix: Water

Analysis Batch: 106665

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106657

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acenaphthene	8.00	5.59		ug/L		70	59 - 100
Acenaphthylene	8.00	5.45		ug/L		68	30 - 100
Anthracene	8.00	5.34		ug/L		67	30 - 105
Benzo[a]anthracene	8.00	6.39		ug/L		80	61 - 103
Benzo[a]pyrene	8.00	5.86		ug/L		73	36 - 119
Benzo[b]fluoranthene	8.00	6.58		ug/L		82	64 - 113
Benzo[g,h,i]perylene	8.00	7.04		ug/L		88	51 - 117
Benzo[k]fluoranthene	8.00	6.44		ug/L		80	72 - 107
Chrysene	8.00	6.45		ug/L		81	67 - 100

TestAmerica Tallahassee

QC Sample Results

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 640-106657/2-A

Matrix: Water

Analysis Batch: 106665

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	8.00	6.76		ug/L		84	44 - 119
Fluoranthene	8.00	6.60		ug/L		82	66 - 107
Fluorene	8.00	6.27		ug/L		78	62 - 102
Indeno[1,2,3-cd]pyrene	8.00	6.66		ug/L		83	59 - 113
1-Methylnaphthalene	8.00	5.60		ug/L		70	48 - 100
2-Methylnaphthalene	8.00	5.71		ug/L		71	52 - 100
Naphthalene	8.00	5.44		ug/L		68	49 - 100
Phenanthrene	8.00	6.07		ug/L		76	64 - 100
Pyrene	8.00	6.35		ug/L		79	63 - 103

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	79		40 - 114

Lab Sample ID: LCSD 640-106657/3-A

Matrix: Water

Analysis Batch: 106665

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 106657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	8.00	5.50		ug/L		69	59 - 100	2	24
Acenaphthylene	8.00	5.29		ug/L		66	30 - 100	3	33
Anthracene	8.00	5.38		ug/L		67	30 - 105	1	30
Benzo[a]anthracene	8.00	6.31		ug/L		79	61 - 103	1	20
Benzo[a]pyrene	8.00	5.97		ug/L		75	36 - 119	2	27
Benzo[b]fluoranthene	8.00	6.58		ug/L		82	64 - 113	0	20
Benzo[g,h,i]perylene	8.00	6.58		ug/L		82	51 - 117	7	20
Benzo[k]fluoranthene	8.00	6.22		ug/L		78	72 - 107	3	20
Chrysene	8.00	6.41		ug/L		80	67 - 100	1	20
Dibenz(a,h)anthracene	8.00	6.16		ug/L		77	44 - 119	9	20
Fluoranthene	8.00	6.48		ug/L		81	66 - 107	2	20
Fluorene	8.00	5.96		ug/L		74	62 - 102	5	22
Indeno[1,2,3-cd]pyrene	8.00	6.40		ug/L		80	59 - 113	4	20
1-Methylnaphthalene	8.00	5.20		ug/L		65	48 - 100	7	28
2-Methylnaphthalene	8.00	5.56		ug/L		70	52 - 100	3	29
Naphthalene	8.00	5.03		ug/L		63	49 - 100	8	32
Phenanthrene	8.00	5.89		ug/L		74	64 - 100	3	20
Pyrene	8.00	6.23		ug/L		78	63 - 103	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	71		40 - 114

TestAmerica Tallahassee

QC Association Summary

Client: Atkins North America Inc
 Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

GC/MS VOA

Analysis Batch: 106782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-1	MW-2	Total/NA	Water	8260C	
640-46223-3	MW-10	Total/NA	Water	8260C	
640-46223-4	MW-6	Total/NA	Water	8260C	
640-46223-5	MW-1	Total/NA	Water	8260C	
640-46223-6	DW-1	Total/NA	Water	8260C	
640-46223-7	MW-3	Total/NA	Water	8260C	
640-46223-8	MW-8	Total/NA	Water	8260C	
LCS 640-106782/2	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-106782/8	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-106782/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 106814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-2	Equipment Blank	Total/NA	Water	8260C	
640-46223-10	Trip Blank	Total/NA	Water	8260C	
LCS 640-106814/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-106814/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-106814/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 106825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-9	MW-5	Total/NA	Water	8260C	
LCS 640-106825/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-106825/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-106825/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 106827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-3 - DL	MW-10	Total/NA	Water	8260C	
640-46223-8 - DL	MW-8	Total/NA	Water	8260C	
LCS 640-106827/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-106827/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-106827/5	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 106657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-1	MW-2	Total/NA	Water	3520C	
640-46223-2	Equipment Blank	Total/NA	Water	3520C	
640-46223-3	MW-10	Total/NA	Water	3520C	
640-46223-4	MW-6	Total/NA	Water	3520C	
640-46223-5	MW-1	Total/NA	Water	3520C	
640-46223-7	MW-3	Total/NA	Water	3520C	
640-46223-8	MW-8	Total/NA	Water	3520C	
640-46223-9	MW-5	Total/NA	Water	3520C	
LCS 640-106657/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 640-106657/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 640-106657/1-A	Method Blank	Total/NA	Water	3520C	

TestAmerica Tallahassee

QC Association Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

GC/MS Semi VOA (Continued)

Analysis Batch: 106665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-1	MW-2	Total/NA	Water	8270D LL	106657
640-46223-2	Equipment Blank	Total/NA	Water	8270D LL	106657
640-46223-4	MW-6	Total/NA	Water	8270D LL	106657
640-46223-5	MW-1	Total/NA	Water	8270D LL	106657
640-46223-7	MW-3	Total/NA	Water	8270D LL	106657
640-46223-8	MW-8	Total/NA	Water	8270D LL	106657
640-46223-9	MW-5	Total/NA	Water	8270D LL	106657
LCS 640-106657/2-A	Lab Control Sample	Total/NA	Water	8270D LL	106657
LCSD 640-106657/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	106657
MB 640-106657/1-A	Method Blank	Total/NA	Water	8270D LL	106657

Analysis Batch: 106670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-46223-3	MW-10	Total/NA	Water	8270D LL	106657

Lab Chronicle

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: MW-2

Lab Sample ID: 640-46223-1

Date Collected: 12/17/13 08:35

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 14:38	LKS	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/22/13 22:00	JMF	TAL TAL

Client Sample ID: Equipment Blank

Lab Sample ID: 640-46223-2

Date Collected: 12/17/13 08:15

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106814	12/30/13 17:06	LAG	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/22/13 22:19	JMF	TAL TAL

Client Sample ID: MW-10

Lab Sample ID: 640-46223-3

Date Collected: 12/17/13 09:12

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 15:43	LKS	TAL TAL
Total/NA	Analysis	8260C	DL	20	106827	12/31/13 13:46	LAG	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		4	106670	12/23/13 15:11	JMF	TAL TAL

Client Sample ID: MW-6

Lab Sample ID: 640-46223-4

Date Collected: 12/17/13 09:50

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 15:00	LKS	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/22/13 22:57	JMF	TAL TAL

Client Sample ID: MW-1

Lab Sample ID: 640-46223-5

Date Collected: 12/17/13 10:19

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 15:22	LKS	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/22/13 23:15	JMF	TAL TAL

TestAmerica Tallahassee

Lab Chronicle

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Client Sample ID: DW-1

Lab Sample ID: 640-46223-6

Date Collected: 12/17/13 11:07

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 13:55	LKS	TAL TAL

Client Sample ID: MW-3

Lab Sample ID: 640-46223-7

Date Collected: 12/17/13 12:39

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 14:17	LKS	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/22/13 23:34	JMF	TAL TAL

Client Sample ID: MW-8

Lab Sample ID: 640-46223-8

Date Collected: 12/17/13 13:06

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106782	12/30/13 16:05	LKS	TAL TAL
Total/NA	Analysis	8260C	DL	10	106827	12/31/13 13:24	LAG	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/22/13 23:53	JMF	TAL TAL

Client Sample ID: MW-5

Lab Sample ID: 640-46223-9

Date Collected: 12/17/13 13:35

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106825	12/31/13 12:53	LAG	TAL TAL
Total/NA	Prep	3520C			106657	12/21/13 16:29	QMC	TAL TAL
Total/NA	Analysis	8270D LL		1	106665	12/23/13 00:12	JMF	TAL TAL

Client Sample ID: Trip Blank

Lab Sample ID: 640-46223-10

Date Collected: 12/17/13 00:00

Matrix: Water

Date Received: 12/20/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	106814	12/30/13 16:43	LAG	TAL TAL

Laboratory References:

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

Certification Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Laboratory: TestAmerica Tallahassee

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14
Georgia	State Program	4		06-30-14
Louisiana	NELAP	6	30663	06-30-14
New Jersey	NELAP	2	FL012	06-30-14
Texas	NELAP	6	T104704459-11-2	03-31-14
USDA	Federal		P330-08-00158	08-05-14

Method Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL TAL
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL TAL

Protocol References:

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

Laboratory References:

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994



Sample Summary

Client: Atkins North America Inc
Project/Site: Key West Groundwater

TestAmerica Job ID: 640-46223-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-46223-1	MW-2	Water	12/17/13 08:35	12/20/13 08:00
640-46223-2	Equipment Blank	Water	12/17/13 08:15	12/20/13 08:00
640-46223-3	MW-10	Water	12/17/13 09:12	12/20/13 08:00
640-46223-4	MW-6	Water	12/17/13 09:50	12/20/13 08:00
640-46223-5	MW-1	Water	12/17/13 10:19	12/20/13 08:00
640-46223-6	DW-1	Water	12/17/13 11:07	12/20/13 08:00
640-46223-7	MW-3	Water	12/17/13 12:39	12/20/13 08:00
640-46223-8	MW-8	Water	12/17/13 13:06	12/20/13 08:00
640-46223-9	MW-5	Water	12/17/13 13:35	12/20/13 08:00
640-46223-10	Trip Blank	Water	12/17/13 00:00	12/20/13 08:00



TESTAMERICA ORLANDO FIELD SAMPLING LOG -
DEP-SOP-001/01- Form FD 9000-24 GROUNDWATER SAMPLING

Meter #'s: M-2 / T-3

PAGE: 1 of 1

SITE NAME: <u>City of Key West</u>	SITE LOCATION: <u>525 Angela St</u>
WELL NO: <u>MW-2</u>	SAMPLE ID: <u>MW-2</u>
DATE: <u>12-17-13</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1/4</u>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): <u>6.19</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) <u>8.41</u> = (<u>14.60</u> feet - <u>6.19</u> feet) X <u>.16</u> gallons/foot = <u>1.35</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>7</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>7</u>	PURGING INITIATED AT: <u>8:16</u>	PURGING ENDED AT: <u>8:31</u>	TOTAL VOLUME PURGED (gallons): <u>2.5</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR describe	ODOR	ORP
8:25	1.35	1.35	.15	6.25	7.19	30.4	728	.17	1.37	clear	ND	-126
8:28	.45	1.80	.15	6.25	7.22	30.5	717	.14	2.67	↓	F	-134
8:31	.45	2.25	.15	6.25	7.21	30.6	726	.12	1.38	↓	F	-133

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Sham Victory / Test America</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>8:31</u>	SAMPLING ENDED AT: <u>8:35</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>7</u>	TUBING MATERIAL CODE: <u>PE</u>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> Filtration Equipment Type: <u> </u>	FILTER SIZE: <u> </u> μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING <input checked="" type="checkbox"/> N (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/>		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPL E ID CODE	# CONTAIN ERS	MATERI AL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>MW-2</u>	<u>2</u>	<u>AG</u>	<u>250</u>	<u>UND</u>	<u>0</u>	<u>7.2</u>	<u>8270</u>	<u>PP</u>	<u>600</u>
<u>↓</u>	<u>3</u>	<u>CG</u>	<u>40</u>	<u>HCl</u>	<u>0</u>	<u>-</u>	<u>8260</u>	<u>RFPP</u>	<u>2150</u>

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

31 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

TESTAMERICA ORLANDO FIELD SAMPLING LOG -
DEP-SOP-001/01- Form FD 9000-24 GROUNDWATER SAMPLING

Meter #s: M-2 / T-3

PAGE: 1 of 1

SITE NAME: <u>City of Key West</u>	SITE LOCATION: <u>525 Angela St</u>
WELL NO: <u>MW-10</u>	SAMPLE ID: <u>MW-10</u>
DATE: <u>12-17-13</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1/8</u>	WELL SCREEN INTERVAL DEPTH: <u>feet to feet</u>	STATIC DEPTH TO WATER (feet): <u>6.54</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) <u>2.86</u> = (<u>9.40</u> feet - <u>6.54</u> feet) X <u>.16</u> gallons/foot = <u>.46</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>8</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>9</u>	PURGING INITIATED AT: <u>843</u>	PURGING ENDED AT: <u>909</u>	TOTAL VOLUME PURGED (gallons): <u>1.8</u>								
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR describe	ODOR	ORP
851	.50	.50	.06	7.76	6.89	29.7	1197	.30	108	cloudy	yes	-175
854	.18	.68	.06	7.76	6.87	29.7	1182	.20	63.8	↓	↓	-184
857	.18	.86	.06	7.76	6.87	29.7	1170	.17	36.6	↓	↓	-186
900	.18	1.04	.06	7.76	6.86	29.7	1151	.12	22.5	↓	↓	-190
903	.18	1.22	.06	7.76	6.86	29.8	1144	.11	13.10	clear	↓	-195
906	.18	1.40	.06	7.76	6.86	29.7	1136	.10	12.20	↓	↓	-188
909	.18	1.58	.06	7.76	6.80	29.8	1125	.09	12.30	↓	↓	-197

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Shawn Victoria / Test America</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>909</u>	SAMPLING ENDED AT: <u>912</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>9</u>	TUBING MATERIAL CODE: <u>PE</u>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input type="checkbox"/> N (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPL E ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-10	2	AG	250	UMP	0	6.8	8270	PP	240
+	3	CG	40	HCl	0	-	8280	RFP	<150

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

TESTAMERICA ORLANDO FIELD SAMPLING LOG -
 DEP-SOP-001/01- Form FD 9000-24 GROUNDWATER SAMPLING

Meter #s: M-2/T-3

PAGE: 1 of 1

SITE NAME: City of Key West SITE LOCATION: 525 Angela St.
 WELL NO: MW-6 SAMPLE ID: MW-6 DATE: 12-17-13

PURGING DATA

WELL DIAMETER (inches): 2 TUBING DIAMETER (inches): 1/8 WELL SCREEN INTERVAL DEPTH: feet to feet STATIC DEPTH TO WATER (feet): 6.97 PURGE PUMP TYPE OR BAILER: PP
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
 (only fill out if applicable) 7.38 = (14.35 feet - 6.97 feet) X 0.16 gallons/foot = 1.18 gallons
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
 (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8 PURGING INITIATED AT: 9:29 PURGING ENDED AT: 9:47 TOTAL VOLUME PURGED (gallons): 2.4

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μ mhos/cm or μ S/cm	DISSOLVED OXYGEN (circle units) μ M or % saturation	TURBIDITY (NTUs)	COLOR describe	ODOR	ORP
9:38	1.18	1.18	.13	7.58	7.43	27.8	552	1.15	3.00	clear	NO	43.0
9:41	.39	1.57	.13	7.58	7.43	28.0	552	.81	4.22			20.7
9:44	.39	1.96	.13	7.58	7.42	28.1	552	.67	5.64			1.5
9:47	.39	2.35	.13	7.58	7.43	28.0	553	.53	5.72			-8.0

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Shawn Victory / Test America SAMPLER(S) SIGNATURE(S): [Signature] SAMPLING INITIATED AT: 9:47 SAMPLING ENDED AT: 9:50
 PUMP OR TUBING DEPTH IN WELL (feet): 8 TUBING MATERIAL CODE: PE FIELD-FILTERED: Y N FILTER SIZE: μ m
 FIELD DECONTAMINATION: PUMP Y TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPL E ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-6	2	AG	250	UMP	0	7.4	8270	PP	520
↓	3	CG	40	HCl	0	—	288280	RFP	150

REMARKS:
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: \pm 0.2 units Temperature: \pm 0.2 °C Specific Conductance: \pm 5% Dissolved Oxygen: all readings \leq 20% saturation (see Table FS 2200-2); optionally, \pm 0.2 mg/L or \pm 10% (whichever is greater) Turbidity: all readings \leq 20 NTU; optionally \pm 5 NTU or \pm 10% (whichever is greater)
 Revision Date: February 12, 2009

TESTAMERICA ORLANDO FIELD SAMPLING LOG -
 DEP-SOP-001/01- Form FD 9000-24 GROUNDWATER SAMPLING

Meter #s: M-2/T-3

PAGE: 1 of 1

SITE NAME: <u>City of Key West</u>	SITE LOCATION: <u>525 Angela St</u>
WELL NO: <u>MW-3</u>	SAMPLE ID: <u>MW-3</u>
DATE: <u>12-17-13</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1/8</u>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): <u>6.58</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY <small>(only fill out if applicable)</small> <u>8.42</u> = (<u>15.00</u> feet - <u>6.58</u> feet) X <u>16</u> gallons/foot = <u>1.35</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <small>(only fill out if applicable)</small> = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>8</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>8</u>	PURGING INITIATED AT: <u>1220</u>	PURGING ENDED AT: <u>1236</u>	TOTAL VOLUME PURGED (gallons): <u>2.3</u>								
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR describe	ODOR	ORP
<u>1230</u>	<u>1.35</u>	<u>1.35</u>	<u>.13</u>	<u>6.68</u>	<u>6.95</u>	<u>30.1</u>	<u>1099</u>	<u>.21</u>	<u>1.21</u>	<u>clear</u>	<u>yes</u>	<u>-159</u>
<u>1233</u>	<u>.39</u>	<u>1.74</u>	<u>.13</u>	<u>6.68</u>	<u>6.95</u>	<u>30.1</u>	<u>1096</u>	<u>.19</u>	<u>0.41</u>	<u>↓</u>	<u>↓</u>	<u>-161</u>
<u>1236</u>	<u>.39</u>	<u>2.13</u>	<u>.13</u>	<u>6.68</u>	<u>6.95</u>	<u>30.0</u>	<u>1096</u>	<u>.18</u>	<u>0.44</u>	<u>↓</u>	<u>↓</u>	<u>-164</u>

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Shawn Victory / Test America</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>1236</u>	SAMPLING ENDED AT: <u>1239</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>8</u>	TUBING MATERIAL CODE: <u>PE</u>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	FILTER SIZE: <u> </u> μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING <input checked="" type="checkbox"/> N (replaced)	DUPLICATE: Y <input checked="" type="checkbox"/>		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPL E ID CODE	# CONTAINERS	MATERI AL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>MW-3</u>	<u>2</u>	<u>AG</u>	<u>250</u>	<u>UNP</u>	<u>0</u>	<u>6.9</u>	<u>8270</u>	<u>PP</u>	<u>520</u>
<u>↓</u>	<u>3</u>	<u>CG</u>	<u>40</u>	<u>HCl</u>	<u>0</u>	<u>-</u>	<u>8260</u>	<u>RFPP</u>	<u>150</u>

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 34 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)
 Revision Date: February 12, 2009

TESTAMERICA ORLANDO FIELD SAMPLING LOG -
 DEP-SOP-001/01- Form FD 9000-24 GROUNDWATER SAMPLING

Meter #s: M-2 / T-3

PAGE: 1 of 1

SITE NAME: City of Key West SITE LOCATION: 525 Angela St
 WELL NO: MW-5 SAMPLE ID: MW-5 DATE: 12-17-13

PURGING DATA

WELL DIAMETER (inches): 2 TUBING DIAMETER (inches): 1/8 WELL SCREEN INTERVAL DEPTH: 6.45 feet TO WATER (feet): 6.45 STATIC DEPTH TO WATER (feet): 6.45 PURGE PUMP TYPE OR BAILER: PP
 WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
 (only fill out if applicable) 8.19 = (14.64 feet - 6.45 feet) X .16 gallons/foot = 1.31 gallons
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
 (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8 PURGING INITIATED AT: 1321 PURGING ENDED AT: 1332 TOTAL VOLUME PURGED (gallons): 2.2

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μ mhos/cm or μ S/cm	DISSOLVED OXYGEN (circle units) (mg/l or % saturation)	TURBIDITY (NTUs)	COLOR describe	ODOR	ORP
1328	1.31	1.31	.19	6.70	7.40	27.3	599	2.50	18.3	Clear	NO	44
1330	.38	1.69	.18	6.70	7.41	27.3	598	2.28	18.0	↓	↓	39
1332	.38	2.07	.18	6.70	7.41	27.3	598	2.25	17.0	↓	↓	39

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Shawn Victory / Test America SAMPLER(S) SIGNATURE(S): [Signature] SAMPLING INITIATED AT: 1332 SAMPLING ENDED AT: 1335
 PUMP OR TUBING DEPTH IN WELL (feet): 8 TUBING MATERIAL CODE: PE FIELD-FILTERED: Y N FILTER SIZE: μ m
 FIELD DECONTAMINATION: PUMP Y TUBING N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPL E ID CODE	# CONTAIN E RS	MATERI AL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-5	2	AG	250	UNP	0	7.5	8270	PP	720
	3	CG	40	HCl	0	-	8260	Ri-PP	150

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)
 Revision Date: February 12, 2009

Field Calibration Logbook

Name: City of Key West Date: 12-17-13 Instrument #: M-2/T-3 Make/Model: YSI 556/Hech 2100P

pH:

	pH Buffer	Lot #	Exp. Date	Time	Inst. Response	Calibrated (Y/N)	Type (ICV, CCV)	Temp. (°C)
Initial	7.00	130534	11/2015	740	7.05	NO	CCV	23.2
	4.00	126618	9/2014	742	4.07	NO	CCV	23.2
	10.00							
Post	7.00	130534	12/2015	1510	7.05	NO	CCV	24.7
	4.00	126618	9/2014	1512	4.08	+	CCV	24.7
	10.00							

CONDUCTIVITY STANDARD:

	Conductivity (uS/cm)	Lot #	Exp. Date	Time	Inst. Response	Calibrated (Y/N)	Type (ICV, CCV)
Initial	100						
	1000	211185	10/2013	750	1000	Yes	ICV
	10000						
Post	100						
	1000	211185	10/2013	1520	1001	NO	CCV
	10000						

DISSOLVED OXYGEN: (Reference Table FS2200-2)*

Temperature Probe Annual Calibration: Date: _____ NIST Therm. ID#: _____

	Temp. (°C)	DO*(mg/L)	Time	Inst. Response	Calibrated (Y/N)	Type (ICV, CCV)
Initial	22.5	8.66	753	225/8.64	Yes	ICV
Post	24.2	8.38	1525	24.2/8.49	NO	CCV

ORP: (Reference Table 6.2 Zobell Solution Values)*

	ORP (milliVolts)*	Lot #	Exp. Date	Time	Temp. (°C)	Inst. Response	Calibrated (Y/N)	Type (ICV, CCV)
Initial								
Post								

TURBIDITY:

	Turbidity (NTU)	Lot #	Exp. Date	Time	Inst. Response	Calibrated (Y/N)	Type (ICV, CCV)
Initial	6.32	A230	11/2013	750	6.45	NO	CCV
	51.9	+	+	+	52.2	+	+
	520	+	+	+	524	+	+
Post	6.32	A230	12/2013	1530	6.49	NO	CCV
	51.9	+	+	+	53.1	+	+
	520	+	+	+	525	+	+

Acceptance Criteria: 1-10 NTU=10%, 11-40 NTU=8%, 41-100 NTU=6.5%, >100 NTU=5%

Calibrated only in Calibrate Mode

ICV- Initial Calibration Verification (perform only in Run Mode)

CCV- Continuing Calibration Verification (perform only in Run Mode)

Signature: _____
Signature: _____

Date: 12/17/13
Date: _____

W. Mark Henry

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