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PHASE II SITE INVESTIGATION REPORT

PARCEL 16A, SOUTHWEST CORNER OF DUBLIN BOULEVARD AND HACIENDA DRIVE

DUBLIN, CALIFORNIA 94568

Prepared for

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Project Number 0002.006.004

terraphase engineering

CONTENTS

APPENDICES

1.0 INTRODUCTION

Terraphase Engineering Inc. (Terraphase) has completed a Phase II Environmental Site Investigation ("the Phase II Investigation") for the property referred to as Parcel 16A located southwest of the intersection of Dublin Boulevard and Hacienda Drive in Dublin, California (the Site). The work was completed in general accordance with the proposed scope of work dated July 25, 2012. The Phase II Investigation was completed to evaluate the potential impacts in soil, soil-gas, and groundwater at the Site.

The Site is an approximately 14 acre, undeveloped parcel located in Dublin, California. The Site is identified as Assessor's Parcel Number 986-0033-007 by the Alameda County Assessor. A Site Vicinity Map is included as Figure 1; a figure showing the current Site Features is included as Figure 2.

2.0 BACKGROUND

The site and surrounding vicinity's first developed use was for Camp Shoemaker in 1942, a US Navy Facility. In 1953, Camp Shoemaker became Camp Parks and was transferred to the Air Force and later to the US Army. Former on-Site structures associated with the military use included a refrigerated warehouse building, part of two additional warehouse buildings, an incinerator, railroad tracks, and a guard house and boiler room. The uses of the surrounding areas included: two gasoline stations, a transportation shop, inflammable storage area, a sign shop, a paint shop and paint storeroom, office space, lumber/storage yard, bakery, former laundry and boiler room, and barracks to the north; and additional warehouse buildings, underground fuel oil storage depot, athletic field house, gatehouse, and guest reception lounge to the south.

Ownership of a portion of Camp Parks that included the Site was transferred to Alameda County in 1969. Alameda County reportedly used the warehouse structures present at the Site for storage of dry goods. The warehouses and other Site features historically present on the Site were demolished in the early to mid-1990s. The Site is currently undeveloped.

2.1 Previous Environmental Activities

Several environmental investigation and remediation activities have previously been conducted at and surrounding the Site. These activities are briefly summarized below (greater detail is provided in the Phase I Environmental Site Assessment (ESA) prepared by Terraphase for the Site [Terrpahase 2012]):

- A soil and groundwater investigation was conducted at the Site by Erler & Kalinowski, Inc (EKI) in June 1998 (EKI 1998). The results of EKI's investigation indicated volatile organic compounds (VOCs), primarily tetrachloroethene (PCE) and trichloroethene (TCE) were detected in groundwater in the northwestern corner of the Site.

- A Phase I ESA and soil and groundwater investigation was conducted for the Site and adjacent parcels by Lowney Associates (Lowney) in 2000 (Lowney 2000). Lowney's investigations found several environmental concerns at the Site including:

    - A 1,000 gallon underground storage tank (UST) in the vicinity of the former boiler room at the Site (the UST was later removed in 2000 and over-excavation of petroleum impacted soils related to the UST was conducted in 2001 [SCI 2002a]).

  - PCE and total petroleum hydrocarbons as diesel (TPH-d) detected in groundwater at the Site.
  - An asbestos-wrapped pipe approximately 1,200 feet in length running east/west across the Site (later removed from the Site in 2001 [SCI 2001]).
  - A 3 to 4' diameter pipe running north/south across the Site (analysis of the water inside the pipe detected 120 parts per billion [ppb] of TPH-d and 1200 ppb of TPH as motor oil [TPH-mo] in the sample).
  - A concrete pad and two vaults that were concluded to be a former restroom on the western portion of the Site. The concrete pad and the two vaults were demolished in 2001 (SCI 2001).

- Soil investigation and remediation of the former incinerator/burn dump site (located on the southeastern corner of the Site) occurred in 2001 (SCI 2002b). Following the completion of the remediation and construction activities in the vicinity of the burn dump/incinerator area, the Department of Toxic Substances Control (DTSC) submitted a letter to the Alameda County Environmental Health Department (ACEHD) in December 2005 indicating that the DTSC had determined that no hazardous substances remained at the former incinerator/burn dump site at levels that could pose a threat to public health or the environment. The DTSC concluded that no further action was necessary at the property (DTSC 2005b).

- A Phase I ESA (Kleinfelder 2011a) and a Phase II soil, groundwater, and soil-gas investigation was conducted by Kleinfelder West, Inc. (Kleinfelder) in 2011. The Phase II investigation work was conducted in November 2011 and a Phase II Addendum (additional investigation) was conducted in December 2011. A draft Phase II report was prepared by Kleinfelder for the November 2011 investigation, but was never finalized (Kleinfelder 2011b). The Phase II Addendum investigation activities occurred at the Site in December 2011; however, no report was submitted for this work and only analytical laboratory reports were available for Terraphase's review. Kleinfelder's investigations confirmed the results of previous investigations and identified the additional environmental issues:
  - TPH-d and TPH-mo in groundwater and soil in the vicinity of the former UST location.
  - TPH-d and TPH-mo in groundwater in the approximate center of the Site.

- TPH-d and TPH-mo in groundwater in the northwestern corner of the Site.

2.2 Recent Phase I Environmental Site Assessment

In July 2012, Terraphase completed a Phase I ESA for the Site. Terraphase identified the following recognized environmental conditions (RECs) and historical RECs (HRECs) in connection with the Site during the Phase I ESA:

- REC-1: Concentrations of PCE have been detected in groundwater along the northern boundary and in the northwest corner of the Site above the Regional Water Quality Control Board's (RWQCB's) Environmental Screening Levels (ESLs) for groundwater that is a potential source of drinking water (RWQCB 2008), but at or below the ESLs for vapor intrusion concerns for commercial/industrial land use. The source of the PCE in groundwater is presumed to be the former service station or laundry facility that was located to the north of the Site (on Parcel 15). These facilities are no longer present to the north. The previous soil vapor investigation conducted by Kleinfelder in this area indicated VOCs were not detected in soil vapor; however, the results of the leak check quality control sampling could not be verified from the laboratory report provided by the current Site owner.

- REC-2: The former UST location. TPH-d and TPH-mo were detected in groundwater samples collected in the vicinity of the former UST above the ESLs for groundwater that is a potential source of drinking water. Although it appears the ACEHD has granted closure to this case, the RWQCB does not have a record of this Site in their online database.

- REC-3: TPH detected in groundwater above the ESL for groundwater that is a potential source of drinking water in the vicinity of the manhole located in the approximate center of the Site. The source of the detected TPH is unknown.

- REC-4: TPH concentrations detected in groundwater above the ESLs for groundwater that is a potential source of drinking water along the western boundary of the Site. The source of the detected TPH concentrations is unknown.

- REC-5: Elevated metals concentrations (specifically beryllium, cadmium, cobalt, copper, lead, mercury, molybdenum, nickel, and vanadium) detected in groundwater above the ESLs for groundwater that is a potential source of drinking water in the vicinity of manholes and the burn dump/incinerator areas.

It is unknown if the elevated metals concentrations are naturally occurring at the Site or the result of a historical release.

- HREC 1: The former burn dump/incinerator area. A former incinerator was located adjacent to the southeastern corner of the Site. Burned debris and rust-colored materials were observed in the subsurface in the southeastern corner of the Site. In 2001, approximately 4,460 tons of burn waste material and impacted fill were excavated and transported off-Site. The soil sampling results indicated elevated concentrations of lead above the residential California Human Health Screening Levels (CHHSLs) remained in soil in a small area of the Site and the ACEHD recommended oversight by an environmental professional during future subsurface work conducted in this area. In 2005, rough grading activities began for the construction of Martinelli Way under the oversight of an environmental professional in accordance with the ACEHD requirements. Rust-colored materials encountered were stockpiled and sampled. The results of the samples indicated lead was not detected above the residential CHHSLs applicable at the time. The soil sampling results were submitted to DTSC. In December 2005, the DTSC submitted a letter to the ACEHD indicating that the DTSC had determined that no hazardous substances remained at the former incinerator/burn dump site at levels that could pose a threat to public health or the environment. The DTSC concluded that no further action was necessary at the property (DTSC 2005b).

As a result of Terraphase's Phase I ESA and at the request of Regency, Terraphase conducted a Phase II investigation to evaluate the impacts the RECs identified in the ESA have had on the soil, soil-gas, and shallow groundwater beneath the Site. The sampling locations are shown on Figure 2.

3.0 PHASE II SOIL AND GROUNDWATER INVESTIGATION

3.1 Field Investigation Methods

Prior to conducting the investigation activities, Terraphase submitted a permit application for the borings to the Alameda County Zone 7 Water Agency. The permit was approved on August 7, 2012.

On August 7, 2012, a private utility locator was contracted to identify underground utilities at each proposed soil gas and soil boring/grab groundwater sampling location.

3.1.1 Soil-Gas Sampling

On August 13 and 14, 2012, Terraphase installed seven soil-gas monitoring wells numbered SG-1 through SG-7 at the approximate locations shown on Figure 2 using a hand auger. The soil gas wells were installed to a depth of approximately 5 feet below ground surface (bgs), with the exception of SG-4. At SG-4, a firm gravel layer was encountered at approximately 3 feet bgs that could not be hand augered through. Therefore, the soil-gas point at SG-4 was set at 3 feet bgs. Each soil-gas well was constructed of a 0.25-inch-diameter, 6-inch-long, stainless-steel screen, with a Swagelok connection to 0.25-inch-diameter Teflon® tubing of sufficient length to extend to the ground surface. The screen was placed at approximately 4.5 to 5 feet bgs, except at SG-4 where the screened interval spanned approximately 2.5 to 3 feet bgs. A filter pack consisting of No. 2/12 sand was placed in each borehole to a depth of approximately 6 inches above the screened interval. Granular bentonite was then placed above the filter pack to the ground surface. The bentonite was placed and hydrated in 1-foot lifts. The top 1 foot was placed and hydrated in 6-inch lifts. Near the ground surface, the sampling tubing was fitted with an airtight valve using a compression fitting to aid in soil-gas sample collection.

After the soil-gas wells were installed, the sampling points were allowed to sit for a minimum of 48 hours. The soil gas samples were collected on August 20, 2012. The tubing of each soil-gas well was evacuated using a syringe. A volume of air equal to one tubing volume was removed from each well. Prior to the sample collection, a clear flexible shroud (i.e., plastic sheeting) was placed around the top of the soil-gas well and the soil gas sample apparatus. The air inside the shroud was enriched with helium to a minimum concentration of 15% by volume (measured using a portable helium detector). The Summa canister sampling assembly consisted of a 1-liter canister (under 30 inches mercury vacuum) and a laboratory-supplied manifold, which contained a pressure gauge and a flow controller set to allow a vapor flow of 150 milliliters per minute.

The soil-gas samples were sent via overnight delivery under chain-of-custody protocol to TestAmerica Laboratories, Inc. (TestAmerica) in Costa Mesa, California, a California-certified laboratory, for analysis. Soil-gas samples collected from soil-gas wells SG-1 through SG-7 were analyzed for VOCs by EPA Method TO-15. Soil-gas samples collected from soil-gas wells SG-6 and SG-7 were also analyzed for naphthalene using EPA Method TO-15 and for methane using Method ASTM D1946.

Soil-gas samples were also analyzed for helium with an analytical reporting limit of approximately 500 parts per million by volume (ppmv) to evaluate if the sample was compromised due to leaks in the system.

3.1.2 Soil and Grab Groundwater Sampling

On August 17, 2012, Terraphase retained Gregg Drilling and Testing, Inc., a licensed drilling subcontractor, to conduct a grab-groundwater and soil sampling survey. A total of nine borings were advanced at the Site: soil and grab groundwater samples were collected from seven soil borings (SB-1 through SB-7) and two additional borings were advanced for the purpose of grab groundwater sample collection only (GGW-1 and GGW-2).

Each location (SB-1 through SB-7, GGW-1, and GGW-2) was hand augered to a depth of 5 feet bgs. Soil samples were collected from SB-1 through SB-7 at depths of 3 to 3.5 feet bgs. The borings were then advanced to depths ranging from 20 to 24 feet bgs using a hydraulic direct-push drill rig. An additional soil sample was collected from 10 to 10.5 feet bgs from borings SB-1 through SB-7. The borings were then advanced until groundwater was encountered and grab groundwater samples were collected using Hydropunch technology. The depth to groundwater ranged from 17 to 22 feet bgs at the boring locations. A duplicate groundwater sample was collected from location SB-3 for quality assurance purposes.

Terraphase collected lithological data from each soil boring. The lithology was described using the Unified Soil Classification System and soil boring logs are in Appendix A. Photo-ionization detector (PID) readings were taken of the hand-augered soil cuttings and of the continuous soil cores from the drill rig. The PID readings did not indicate the presence VOCs above the instrument's detection limit. Each soil boring was abandoned using a cement-bentonite grout, injected under pressure, from the bottom of the borehole to the surface.

Equipment decontamination water and soil cuttings generated during this investigation were stored in a 55-gallon drum and were temporarily staged at the Site. The drum was characterized to ensure proper disposal in accordance with state and federal requirements. At the time of the writing of this report, the drum is awaiting off-site disposal.

The soil and groundwater samples were labeled and placed in an ice-filled cooler and transported under chain of custody protocol to TestAmerica in Pleasanton, California for analysis of TPH-d and TPH-mo using EPA Method 8015.

3.2 Summary of Analytical Results

The following sections summarize the results of the analytical data collected by Terraphase.

3.2.1 Summary of Soil-Gas Analytical Results

The soil-gas sample analytical results are summarized in Table 1; laboratory analytical data reports are included in Appendix B. The analytical results were compared to ESLs for shallow soil gas for commercial/industrial land use and the DTSC CHHSLs for shallow soil gas for commercial/industrial land use (DTSC 2005a).

Figure 3 shows the results of the soil-gas sampling as well as historical groundwater data collected at the Site. PCE was detected in the shallow soil gas in the northwestern corner of the Site at concentrations ranging from 10 ug/m^3 to 200 ug/m^3. The detected concentrations are below the ESL and CHHSL for PCE in soil-gas for commercial/industrial land use (1,400 ug/m^3 and 603 ug/m^3, respectively).

Other VOCs were detected in soil-gas samples, but at concentrations below the ESLs and CHHSLs.

3.2.2 Summary of Soil Analytical Results

The soil sample analytical results are summarized in Table 2; laboratory analytical data reports are included in Appendix B. The analytical results were compared to the ESLs for commercial/industrial soil where groundwater is a potential source of drinking water. A summary of the analytical results are presented on Figure 5. Detected TPH-d concentrations in the soil samples ranged from 1.5 mg/kg to 300 mg/kg. Only one sample had TPH-d detected at a concentration above the ESL for commercial/industrial soil where groundwater is a potential source of drinking water (83 mg/kg). This sample was collected from boring SB-5 at a depth of 3 to 3.5 feet bgs. The detected TPH-d concentration in the deeper sample collected at this location (from 10-10.5 feet bgs) was 2.4 mg/kg, below the ESL. TPH-mo was detected in one sample collected from boring SB-5 from 3 to 3.5 feet bgs at a concentration of 1,300 mg/kg, which is below the ESL for TPH-mo (2,500 mg/kg). TPH-mo was not detected above the laboratory detection limit in any of the other soil samples collected.

3.2.3 Summary of Groundwater Analytical Results

The groundwater analytical results are summarized in Table 3; laboratory analytical data reports are included in Appendix B. The analytical results were compared to ESLs where groundwater is a potential source of drinking water. A summary of the analytical results are presented on Figure 5. Groundwater was encountered at a depth of approximately 17 to 22 feet bgs which is generally consistent with groundwater depths described in previous investigation reports (Lowney 2001). TPH-d was detected in five of the nine grab groundwater samples above the laboratory detection limits at concentrations ranging from 76 ug/L to 190 ug/L. Only the grab groundwater samples collected from borings SB-6 and SB-7 (in the vicinity of the former UST location) were above the ESL of 100 ug/L. TPH-mo was detected in five of the nine grab groundwater samples above the laboratory detection limits at concentrations ranging from 140 ug/L to 360 ug/L. The detected TPH-mo concentrations in groundwater were above the ESL of 100 ug/L.

4.0 DISCUSSION OF DATA

The detected PCE concentrations in the soil gas samples collected by Terraphase were below the regulatory limits that would present a vapor intrusion concern for commercial/industrial land use. This is consistent with historical groundwater sample results collected at the Site (shown on Figure 3) where detected PCE concentrations in groundwater in this portion of the Site were above the ESLs for drinking water (5 ug/L), but were below the ESLs that would pose a vapor intrusion concern for a commercial/industrial land use (420 ug/L). It appears that the source of the PCE detected in groundwater and soil-gas is from Parcel 15 located to the north of the Site.

Figure 4 shows the TPH analytical results in soil collected at the Site. TPH-d was detected in shallow soil (approximately 3 feet bgs) above the commercial/industrial ESL for soil where groundwater is a potential drinking water source (83 mg/kg) from one sample collected in the approximate center of the Site (boring SB-5). The source of the TPH detection in soil at this location is unknown, but it is possible it may be related to a 3 to 4 ft diameter pipe that ran through the center of the Site that was detected during a geophysical survey and during test-pitting activities conducted by Lowney in 2000. It is unknown if the 3-4' diameter pipe has been removed from the Site.

TPH-d was also detected in a soil sample (boring K-19 shown on Figure 4) collected at 14 feet bgs by Kleinfelder in 2011 above the ESL for commercial/industrial soil where groundwater is a potential drinking water source in the vicinity of the former UST. The source of the TPH in this area is likely the former UST that was removed from the Site in 2000.

TPH-d and TPH-mo were detected in groundwater above the ESLs where groundwater is a potential drinking water source (100 ug/L for both analytes) in three areas of the Site (Figure 5):

1. In the vicinity of the former UST location. The UST has been removed and soil excavation has been conducted in the vicinity of the former UST. The case has been granted closure by the ACEHD.
2. In the approximate center of the Site in the vicinity of the shallow soil impacts identified in boring SB-5. The source of the TPH impacts detected may be related to groundwater plume migration from the former UST or the impacts may be related to the 3 to 4 ft diameter pipe that ran through the center of the Site that was detected during a geophysical survey and during test-pitting activities conducted by Lowney in 2000.
3. Along the western boundary of the Site. The source of these detections in groundwater is not clear at this time. Based on the groundwater

concentration distribution of samples collected by Terraphase and previous consultants at the Site, it appears the source of TPH was within the boundaries of the Site in the northwestern corner of the Site. TPH in groundwater was detected on the western boundary of the Site above the ESL and may have the potential to extend just slightly beyond the western Site boundary.

5.0 REFERENCES

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Terraphase Engineering Inc. (Terraphase). 2012. Phase I Environmental Site Assessment, Parcel 16A, Southwest Corner of Dublin Boulevard and Hacienda Drive, Dublin, California 94568. September 12.

Table 1
Summary of Soil-Gas Sampling Results
Parcel 16A
Dublin, California

Sample Identification	Sample Date	Acetone	Benzene	2-Butanone	Carbon Disulfide	Chlorobenzene	Chloroform	1,3-Dichlorobenzene	Dichlorodifluoromethane	4-Ethyltoluene	2-Hexanone	Methylene Chloride
SG-1	8/20/2012	30	6.2	4.3	7.6	<1.4	<1.5	5.6	2.2	<2.0	1.7	<1.4
SG-2	8/20/2012	<5.5	7.4	<6.8	8.2	<4.0	<4.2	7.1	<5.7	<5.7	<4.8	<4.0
SG-3	8/20/2012	23	7.5	<5.2	23	<3.1	17	6.2	<4.4	<4.4	<3.6	<3.1
SG-4	8/20/2012	42	2.9	4.3	6.4	1.8	7.9	5.8	2.2	<2.0	1.9	5.4
SG-5	8/20/2012	43	3.9	7.5	<4.3	<2.4	<2.5	<4.1	<3.4	3.5	3.2	<2.4
SG-6	8/20/2012	17	11	<6.0	76	<3.5	4.4	<6.1	<5.0	<5.0	<4.1	<3.5
SG-7	8/20/2012	18	3.0	3.5	<2.5	<1.4	<1.5	<2.4	2.4	<2.0	1.6	<1.4
Screening Criteria												
ESL		1.8E+06	2.8E+02	--	--	5.8E+05	1.5E+03	6.1E+04	--	--	--	1.7E+04
CHHSL		--	1.22E+02	--	--	--	--	--	--	--	--	--

Notes:

Results reported in micrograms per cubic meter (ug/m^3), except methane which is reported in percent by volume.
ESL = Environmental Screening Level for shallow soil gas for commercial/industrial land use
CHHSL = California Human Health Screening Level for shallow soil gas for commercial/industrial land use
NA = Sample not analyzed for the compound.
-- = ESL and/or CHHSL not available for this compound.

Table 1
Summary of Soil-Gas Sampling Results
Parcel 16A
Dublin, California

Sample Identification	Sample Date	4-Methyl-2-pentanone	Styrene	Tetrachloroethene	Trichloroethene	Toluene	Trichlorofluoromethane	m,p-Xylene	o-Xylene	Napthalene	Methane (%)
SG-1	8/20/2012	<1.6	<1.7	200	<2.1	3.5	<2.2	3.8	1.8	NA	NA
SG-2	8/20/2012	<4.8	<4.9	23	<6.2	<4.4	7.7	<10	<5.0	NA	NA
SG-3	8/20/2012	<3.6	<3.8	14	<4.8	<3.3	<5.0	<7.7	<3.9	NA	NA
SG-4	8/20/2012	<1.6	3.1	10	<2.1	17	<2.2	3.5	<1.7	NA	NA
SG-5	8/20/2012	3.6	<2.9	37	<3.7	2.9	<3.9	7.0	3.5	NA	NA
SG-6	8/20/2012	<4.1	<4.3	7.0	<5.4	4.6	27	9.9	6.0	<27	0.0027
SG-7	8/20/2012	<1.6	<1.7	<2.7	<2.1	<1.5	<2.2	<3.5	<1.7	<10	<0.00089
Screening Criteria											
ESL		--	3.5E+05	1.4E+03	4.1E+03	1.8E+05	--	5.8E+04	5.8E+04	2.4E+02	--
CHHSL		--	--	6.03E+02	1.77E+03	3.78E+05	--	8.87E+05	8.79E+05	1.06E+02	--

Notes:

Results reported in micrograms per cubic meter (ug/m^3), except methane which is reported in percent by volume.
ESL = Environmental Screening Level for shallow soil gas for commercial/industrial land use
CHHSL = California Human Health Screening Level for shallow soil gas for commercial/industrial land use
NA = Sample not analyzed for the compound.
-- = ESL and/or CHHSL not available for this compound.

Table 2
Summary of Soil Sampling Results
Parcel 16A
Dublin, California

Sample ID	Sample Depth (feet below ground surface)	Sample Date	TPH-d	TPH-mo
SB-1-3	3	8/17/2012	2.4	<50
SB-1-10	10	8/17/2012	1.5	<49
SB-2-3	3	8/17/2012	2.1	<49
SB-2-10	10	8/17/2012	<0.99	<50
SB-3-3	3	8/17/2012	2.6	<50
SB-3-10	10	8/17/2012	1.5	<50
SB-4-3	3	8/17/2012	2.6	<50
SB-4-10	10	8/17/2012	2.2	<49
SB-5-3	3	8/17/2012	300	1300
SB-5-10	10	8/17/2012	2.4	<50
SB-6-3	3	8/17/2012	<0.99	<50
SB-6-10	10	8/17/2012	<1.0	<50
SB-7-3	3	8/17/2012	4.5	<49
SB-7-10	10	8/17/2012	2.4	<50
Screening Levels				
		ESL	83	2500

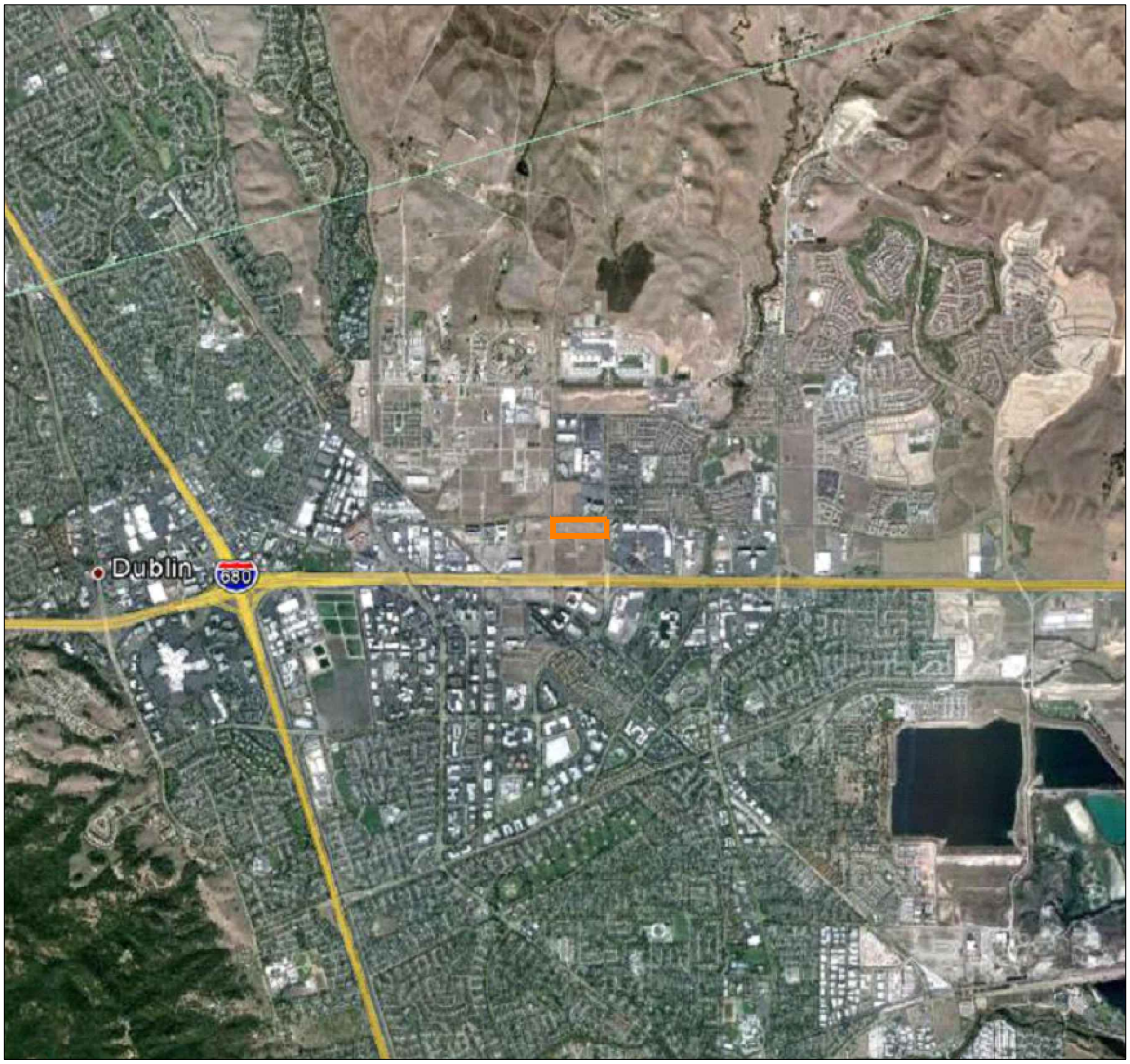
Notes:
Results reported in milligrams per kilogram (mg/kg)
TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil
ESL = Environmental Screening Level for commercial/industrial shallow soil where groundwater is a potential source of drinking water.
= Detected concentration is above the ESL.

Table 3
Summary of Groundwater Sampling Results
Parcel 16A
Dublin, California

Sample Identification	Sample Date	TPH-d	TPH-mo
SB-1	8/17/2012	98	200
SB-2	8/17/2012	76	140
SB-3	8/17/2012	<62	<120
SB-3D	8/17/2012	<52	<100
SB-4	8/17/2012	<62	<120
SB-5	8/17/2012	93	350
SB-6	8/17/2012	130	210
SB-7	8/17/2012	190	360
GGW-1	8/17/2012	<52	<100
GGW-2	8/17/2012	<52	<100
Screening Levels			
	ESL	100	100

Notes:
Results reported in micrograms per liter (ug/L).

TPH-d = total petroleum hydrocarbons as diesel
TPH-mo = total petroleum hydrocarbons as motor oil
ESL = Environmental Screening Level for Groundwater that is a potential source of drinking water.
= Detected concentration is above the ESL.



Legend

Approximate Site Boundary

N

0' 2500' 5000' 10000'

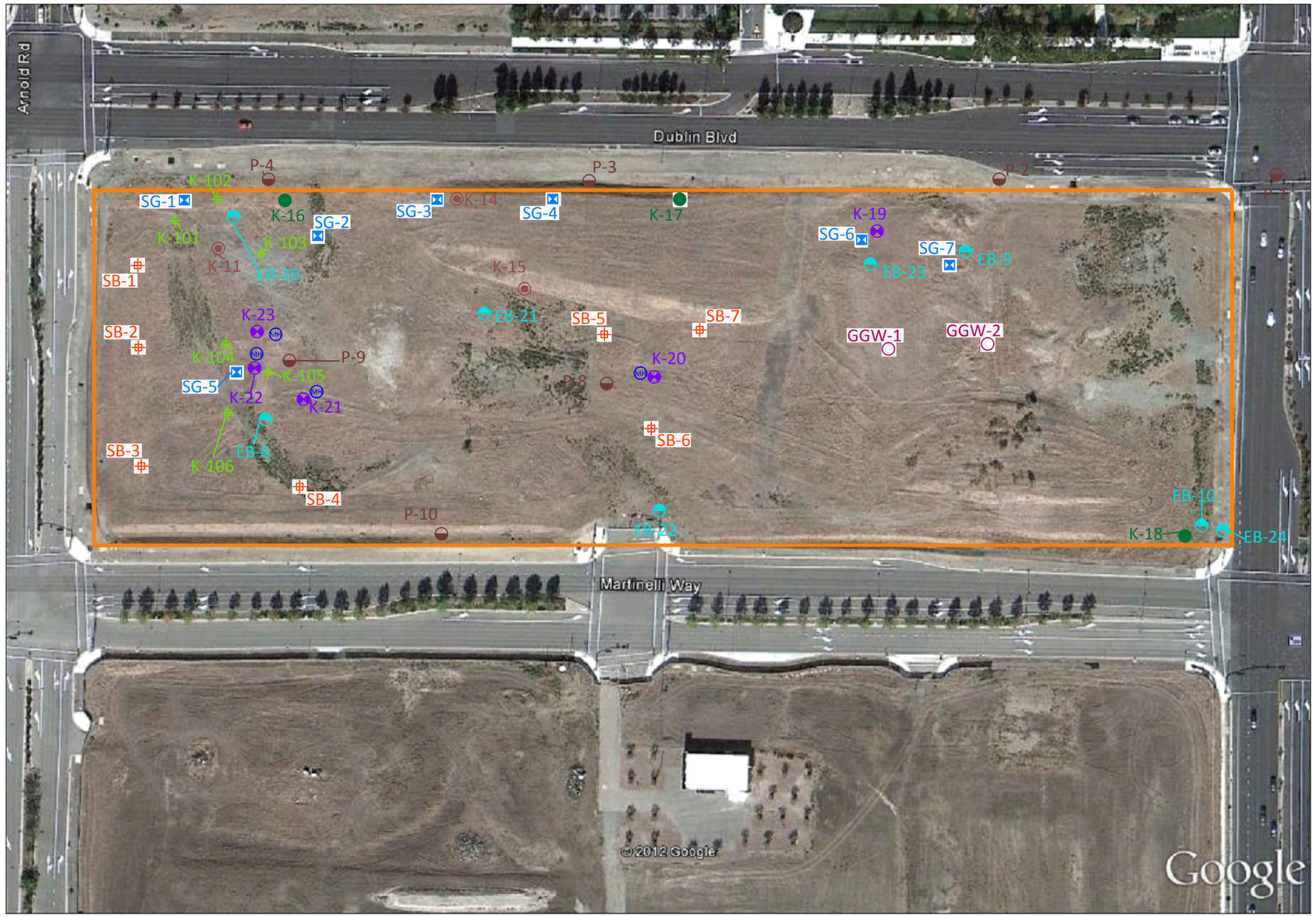
Approximate Scale in Feet

SAFETY FIRST	CLIENT: Regency Centers, L.P.	**Site Vicinity Map**
terraphase engineering	PROJECT: Parcel 16A	
	PROJECT NUMBER: 0002.006.001	**Figure 1**

J:\CADD FILES\0002 Regency Centers - 006 Dublin\Maps.dwg Drawn by: KW ; Checked by: WB

Legend

- Approximate Site Boundary
- Approximate Location of Existing Manholes and Vaults
- K-16 — Approximate Location of Groundwater Sample Collected by Kleinfelder (2011)
- K-15 — Approximate Location of Groundwater Sample Collected by Kleinfelder (2011)
- K-21 — Approximate Location of Soil and Groundwater Samples Collected by Kleinfelder (2011)
- K-106 — Approximate Location of Groundwater Sample (2011)
- EB-20 — Approximate Location of Groundwater Sample Collected by Lowney Associates (2000)
- P-9 — Approximate Location of Groundwater Sample Collected by Erler & Kalinowski (1998)
- SG-2 — Proposed Soil-Gas Sampling Location
- SB-1 — Proposed Soil and Grab-Groundwater Sampling Location
- GGW-1 — Proposed Grab-Groundwater Sampling Location



N

0' 75' 150' 300'

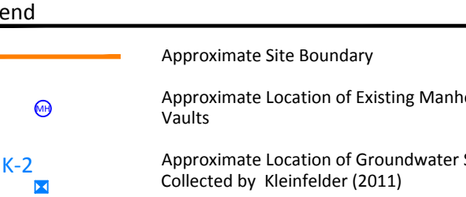
Approximate Scale in Feet

SAFETY FIRST	CLIENT: Regency Centers, L.P.	Approximate Sample Locations
terraphase engineering	PROJECT: Parcel 16A	
	PROJECT NUMBER: 0002.006.001	Figure 2

J:\CADD FILES\0002 Regency Centers - 006 Dublin\Maps.dwg Drawn by: KW ; Checked by: WB

Legend

- Approximate Site Boundary
- Approximate Location of Existing Manholes and Vaults
- K-2 — Approximate Location of Groundwater Sample Collected by Kleinfelder (2011)
- K-21 — Approximate Location of Soil and Groundwater Samples Collected by Kleinfelder (2011)
- EB-20 — Approximate Location of Groundwater Sample Collected by Lowney Associates (2000)
- P-9 — Approximate Location of Groundwater Sample Collected by Erler & Kalinowski (1998)
- SG-2 — Approximate Location of Soil Gas Sample Collected by Terraphase Engineering Inc. (2012)
- 37 — Analytical Result Exceeds Environmental Screening Level (ESL) for Groundwater that is a potential source of drinking water 5 µg/L), but are below the ESL for potential vapor intrusion concerns (420 µg/L).

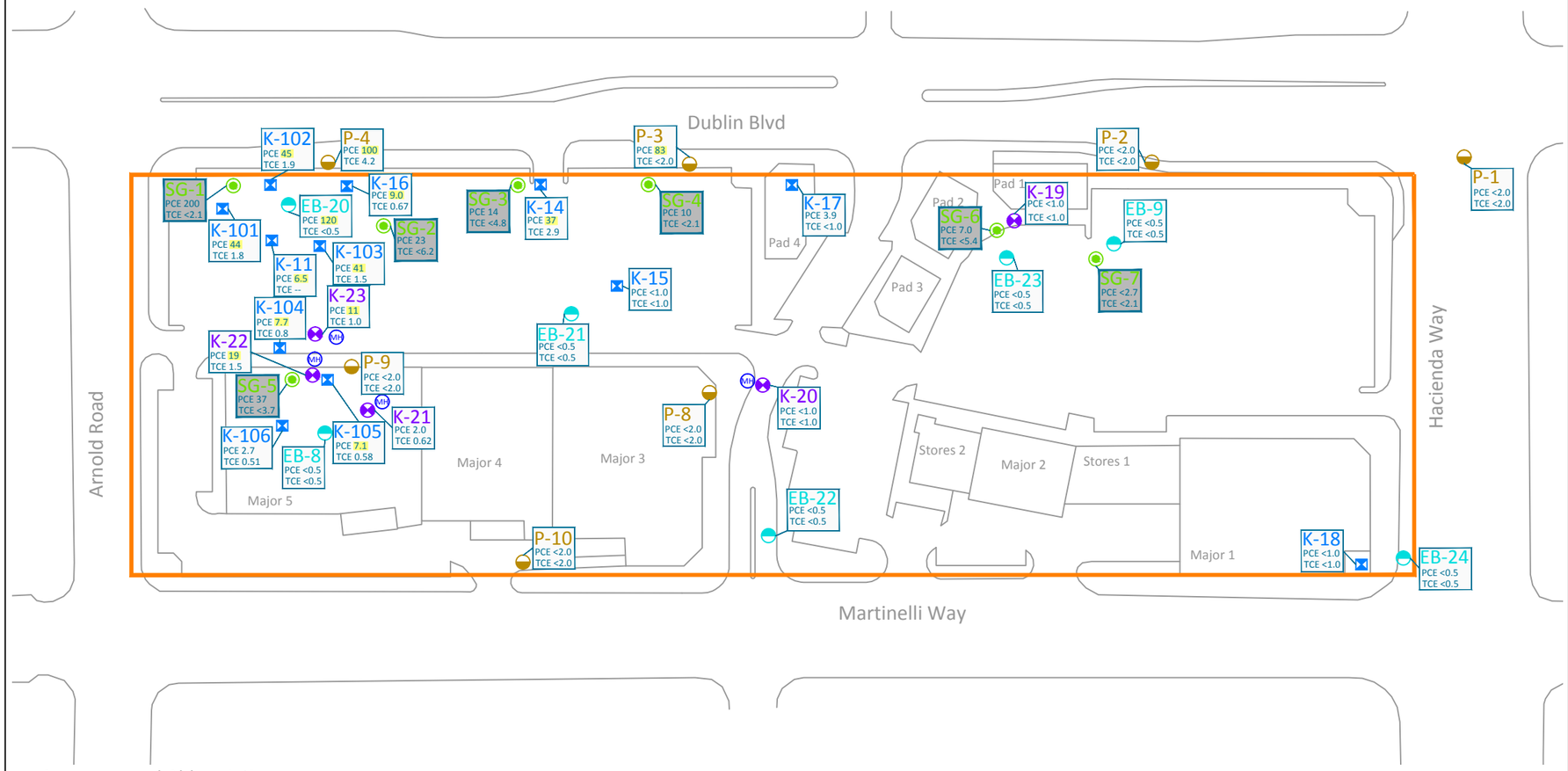


	PCE	TCE
ESL (µg/m³) in Soil Gas	1,400	4,100
CHHSL (µg/m³) in Soil Gas	603	1,770
ESL (µg/L) in Groundwater	5	5

N

0' 75' 150' 300'

Approximate Scale in Feet



Acronyms and Abbreviations

CHHSL	California Human Health Screening Level
ESL	Environmental Screening Level
PCE	Tetrachloroethene
TCE	Trichloroethene
µg/L	Micrograms per Liter
µg/m³	Micrograms per Cubic Meter

Notes

1. Analytical results from Kleinfelder investigation were provided to Terraphase Engineering Inc. by Alameda County General Services Agency.
2. Analytical results from Lowney Associates investigation were obtained from Lowney Associates report entitled "Phase 1 Environmental Site Assessment and Soil and Groundwater Quality Evaluation, Cisco Systems 9, Dublin, California" dated November 30, 2000.
3. Analytical results from EKI investigation were obtained from EKI's report entitled "Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment for Properties at Hacienda Dr and Dublin Blvd in Dublin, California" dated June 19, 1998.

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CLIENT: Regency Centers, L.P.

PROJECT: Parcel 16A

PROJECT NUMBER: 0002.006.004

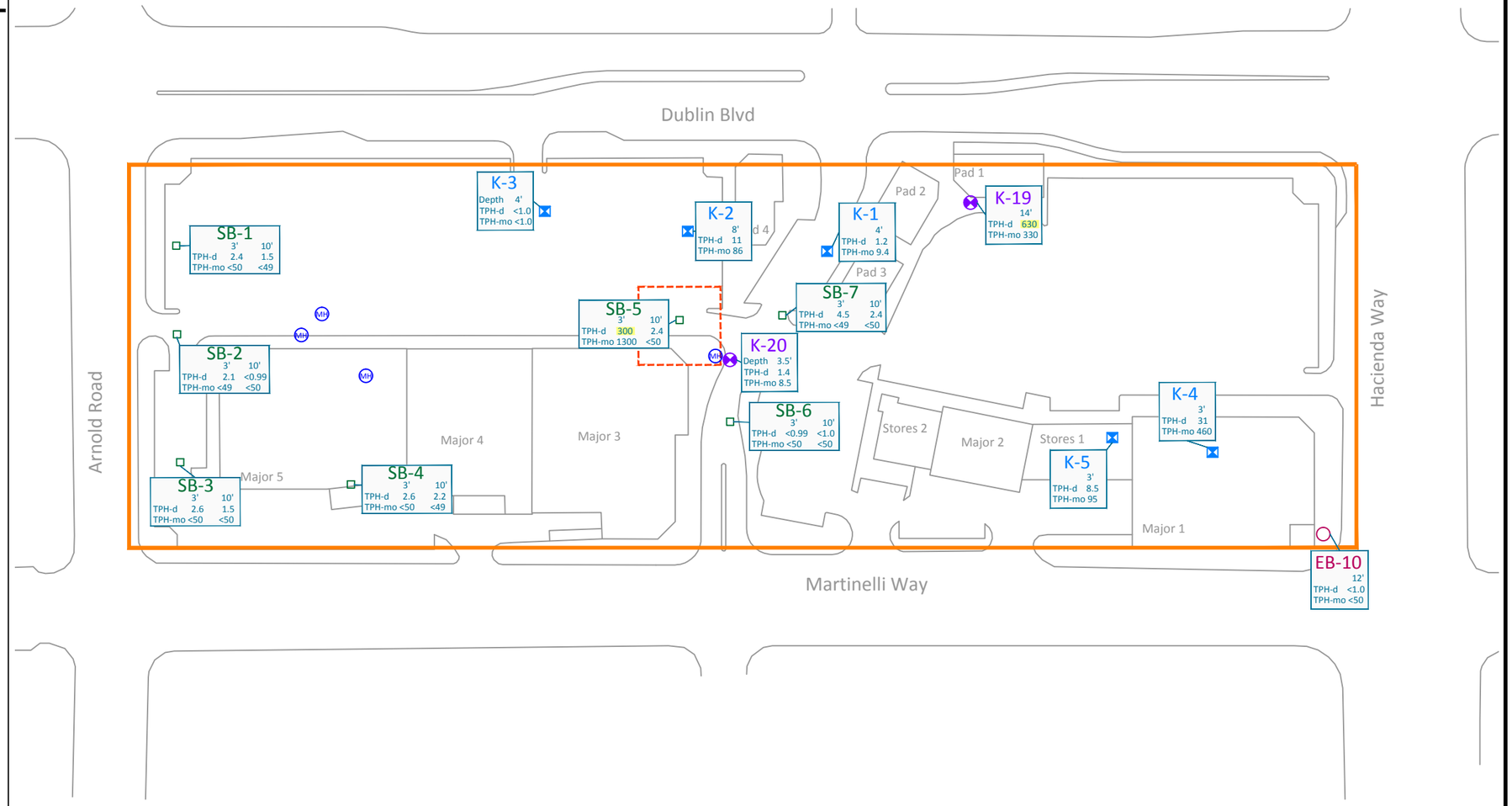
Approximate Locations of Groundwater and Soil Gas Samples and PCE and TCE Results

Figure 3

J:\CADD FILES\0002 Regency Centers - 006 Dublin\Maps.dwg Drawn by: KW ; Checked by: WB

Legend

- Approximate Site Boundary
- Estimated Extent of Potential Soil Excavation
- Approximate Location of Existing Manholes and Vaults
- K-2 — Approximate Location of Groundwater Sample Collected by Kleinfelder (2011)
- K-21 — Approximate Location of Soil and Groundwater Samples Collected by Kleinfelder (2011)
- EB-10 — Approximate Location of Soil Sample Collected by Lowney Associates (2000)
- SB-1 — Approximate Location of Soil and Grab-Groundwater Sample Collected by Terraphase Engineering Inc. (2012)
- 630 — Analytical Result Exceeds Environmental Screening Level for Shallow Soil; Commercial/Industrial Land Use (Where Groundwater is a Current or Potential Source of Drinking Water)



Sample Identification
EB-10
12'
TPH-d <1.0
TPH-mo <50
Sample Depth
Concentration Data in mg/kg
Analytes

	TPH-d	TPH-mo
ESL (mg/kg) in Shallow Soil (Commercial and Industrial Land Use)	83	2,500

N

0' 75' 150' 300'

Approximate Scale in Feet

Acronyms and Abbreviations

ESL	Environmental Screening Level
mg/kg	Milligrams per Kilogram
TPH-d	Total Petroleum Hydrocarbons as Diesel
TPH-mo	Total Petroleum Hydrocarbons as Motor Oil

Notes

1. Only results for TPH are shown on this figure.
2. Analytical results from Kleinfelder investigation were provided to Terraphase Engineering Inc. by Alameda County General Services Agency.

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CLIENT: Regency Centers, L.P.

PROJECT: Parcel 16A

PROJECT NUMBER: 0002.006.004

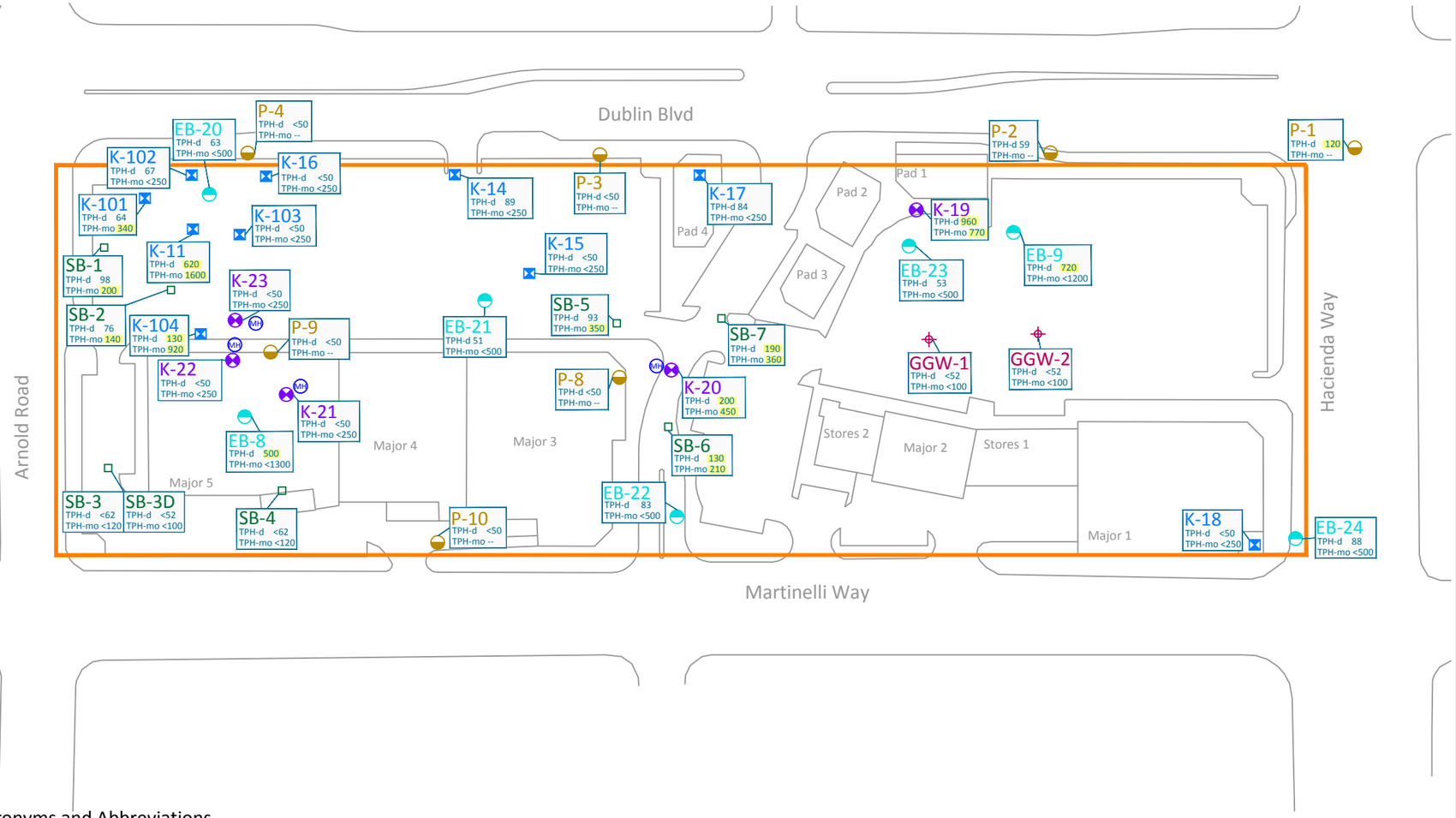
Approximate Locations of Soil Samples and TPH Results

Figure 4

J:\CADD FILES\0002 Regency Centers - 006 Dublin\Maps.dwg Drawn by: KW ; Checked by: WB

Legend

- Approximate Site Boundary
- MH — Approximate Location of Existing Manholes and Vaults
- K-2 — Approximate Location of Groundwater Sample Collected by Kleinfelder (2011)
- K-21 — Approximate Location of Soil and Groundwater Samples Collected by Kleinfelder (2011)
- EB-20 — Approximate Location of Groundwater Sample Collected by Lowney Associates (2000)
- P-9 — Approximate Location of Groundwater Sample Collected by Erler & Kalinowski (1998)
- SB-1 — Approximate Location of Soil and Grab-Groundwater Sample Collected by Terraphase Engineering Inc. (2012)
- GGW-1 — Approximate Location of Grab-Groundwater Sample Collected by Terraphase Engineering Inc. (2012)
- 350 — Analytical Result Exceeds Environmental Screening Level (Groundwater is a Current or Potential Drinking Water Source)
- -- — Sample Not Analyzed for That Constituent



Sample Identification

Analytes — K-22 (TPH-d <50, TPH-mo <250) — Concentration Data in µg/L

	TPH-d	TPH-mo
ESL (µg/L) in Groundwater	100	100

N

0' 75' 150' 300'

Approximate Scale in Feet

Acronyms and Abbreviations

ESL	Environmental Screening Level
TPH-d	Total Petroleum Hydrocarbons as Diesel
TPH-mo	Total Petroleum Hydrocarbons as Motor Oil
µg/L	Micrograms per Liter

Notes

1. Analytical results from Kleinfelder investigation were provided to Terraphase Engineering Inc. by Alameda County General Services Agency.
2. Analytical results from Lowney Associates investigation were obtained from Lowney Associates report entitled "Phase 1 Environmental Site Assessment and Soil and Groundwater Quality Evaluation, Cisco Systems 9, Dublin, California" dated November 30, 2000.
3. Analytical results from EKI investigation were obtained from EKI's report entitled "Results of Soil and Groundwater Investigations and Screening Human Health Risk Assessment for Properties at Hacienda Dr and Dublin Blvd in Dublin, California" dated June 19, 1998.

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terraphase engineering

CLIENT: Regency Centers, L.P.

PROJECT: Parcel 16A

PROJECT NUMBER: 0002.006.004

Approximate Locations of Groundwater Samples and TPH Results

Figure 5

Appendix A

Boring Logs

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Project: **Dublin Parcel 16A**

Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**

Project Number: **0002.006.004**

Log of Boring SB-1

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **24 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~21 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Northwestern portion of site, adjacent to SB-2 and SG-1.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				CL-ML		10YR-2/2	Saturated from 22 to 24 feet Silty clay, very dark brown, dry to moist, firm, low plasticity		Hand augered to 5 feet bgs.
		3-3.5						0	
				CL-ML		2.5Y-4/3	Silty clay, olive brown, moist, firm, low plasticity, salted root channels from 4 to 6.5 feet		
5								0	
			46 / 36					0	
								0	
								0	
								0	
								0	
10		10-10.5	43 / 48					0	
			46 / 48					0	
								0	
								0	
15								0	
			39 / 48				Soft, with roots at 16 feet	0	
								0	
								0	Grab groundwater sample collected using peristaltic pump. Screened from 19 to 24 feet bgs.
20			39 / 48	SP-SC		2.5Y-4/3	Clayey sand, olive brown, moist to wet, medium dense, medium coarse, poorly graded, increasing clay with depth, soft	0	
								0	
								0	
								0	
								0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
10 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

SILTY CLAY (CL-ML)

Poorly graded SAND with Clay (SP-SC)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project: **Dublin Parcel 16A**

Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**

Project Number: **0002.006.004**

Log of Boring SB-2

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **24 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~21 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Western portion of site, adjacent to SB-1 and SG-5.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				CL-ML		10YR-3/2	Silty clay with minor gravel, very dark grayish brown, dry to moist, firm, low plasticity, vegetation	0	Hand augered to 5 feet bgs.
		3-3.5						0	
5								0	
			36 / 36					0	
								0	
								0	
				GW		5YR-4/3	Gravel, reddish brown, loose, angular, well graded	0	
				CL		10YR-3/3	Clay, dark brown, moist, firm, medium plasticity	0	
10		10-10.5	33 / 48					0	
								0	
								0	
								0	
				SC		10YR-4/4	Clayey sand with minor gravel, dark yellowish brown, moist, medium-coarse to coarse grained, medium dense, moderately poorly graded	0	
				CL-ML		2.5Y-3/3		0	
			46 / 48				Silty clay, dark olive brown, moist, firm, low plasticity	0	
15								0	
								0	
				GW		2.5YR-5/6	Gravel, red, dry to moist, loose, angular, well graded	0	
				CL-ML		2.5Y-4/3	Silty clay with minor sand, olive brown, moist, firm, low plasticity	0	
			32 / 48					0	
								0	
20								0	Grab groundwater sample collected using peristaltic pump. Screened from 19 to 24 feet bgs.
								0	
				CL		2.5Y-5/3	Sandy clay, light olive brown, moist, soft, low plasticity	0	
			46 / 48					0	
				CL-ML		2.5Y-4/3	Silty clay with minor sand, olive brown, moist, firm, low plasticity	0	
								0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
10 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
Well graded GRAVEL (GW)
Clayey SAND (SC)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project: **Dublin Parcel 16A**

Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**

Project Number: **0002.006.004**

Log of Boring SB-3

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **24 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~22 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Southwestern portion of site, adjacent to SB-4 and SG-5.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				CL-ML		10YR-2/2	Silty clay, very dark brown, dry to moist, firm, low to medium plasticity		Hand augered to 5 feet bgs.
		3-3.5						0	
							Light gray salt inside root channels from 4 to 6 feet.		
5								0	
			46 / 36					0	
						10YR-4/3	Brown at 7 feet.	0	
								0	
								0	
10		10-10.5	45 / 48				Silty clay with minor fine gravel from 10 to 10.5 feet	0	
								0	
								0	
								0	
			48 / 48					0	
15								0	
								0	
				CL-ML		2.5Y-4/3	Silty clay with minor sand, olive brown, moist, firm to soft, low plasticity	0	
			44 / 48					0	
								0	
20				GW		10YR-4/3	Gravel, light gray, cemented, well-graded from 20 to 20.25 feet	0	Grab groundwater sample collected using peristaltic pump. Screened from 19 to 24 feet.
				CL-ML			Silty clay, brown, moist, firm, low plasticity	0	
				CL		2.5Y-5/3	Sandy clay with minor silt, light olive brown, moist to slightly wet, soft to firm, low plasticity	0	
			46 / 48					0	
								0	
25								0	

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
10 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

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CONS: One-dimensional consolidation test
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PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
Well graded GRAVEL (GW)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Project: **Dublin Parcel 16A**

Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**

Project Number: **0002.006.004**

Log of Boring SB-4

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **24 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~22 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Southwestern portion of site, adjacent to SB-3 and SG-5.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				CL-ML		10YR-2/2	Wet from 22 to 23 feet		Hand augered to 5 feet bgs.
							Silty clay with minor gravel, very dark brown, dry to moist, firm, low plasticity		
		3-3.5						0	
							Salt filled root channels from 4 to 6 feet		
5								0	
			45 / 36					0	
								0	
								0	
				CL-ML		10YR-4/2		0	
				CL-ML		10YR-4/3	Silty clay with angular gravel, dark grayish brown, dry, firm, no plasticity	0	
							Silty clay with sand and minor gravel, brown, moist, medium plasticity		
10		10-10.5	43 / 48				Minor sand and gravel at 9.5 feet	0	
								0	
								0	
								0	
								0	
			25 / 48					0	
15								0	
								0	
								0	
			8 / 48					0	
						10YR-4/4	Dark yellowish brown, soft, low plasticity at 19 feet	0	
20								0	Grab groundwater sample collected using peristaltic pump. Screened from 19 to 24 feet bgs.
				CL		10YR-4/4	Sandy clay, dark yellowish brown, moist, very soft, low plasticity, increasing sand with depth	0	
			41 / 48				Wet at 22 feet	0	
								0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
10 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)

SILTY CLAY (CL-ML)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

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Project: **Dublin Parcel 16A**

Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**

Project Number: **0002.006.004**

Log of Boring SB-5

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **24 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~21 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Center of site, adjacent to SB-6 and SB-7.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				ML		10YR-5/2	Gravelly silt, grayish brown, dry, no plasticity		Hand augered to 5 feet bgs.
		3-3.5						0	
5				CL-ML		10YR-2/2	Silty clay with minorgravel, very dark brown, moist, firm, low to medium plasticity, large dry gravel up to 2" from 6.5 to 6.75 feet and from 8.5 to 8.75 feet	0	
			33 / 36					0	
								0	
								0	
				CL-ML		10YR-4/4	Silty clay with minor gravel, brown, moist, firm, medium plasticity at 8.75 feet	0	
10		10-10.5	41 / 48					0	
								0	
						10YR-2/2	Very dark brown at 12 feet	0	
								0	
			47 / 48			10YR-4/4	Large gravel from 14 to 14.25 feet	0	
15							Silty clay with gravel, brown, moist, firm, low plasticity	0	
								0	
								0	
			46 / 48					0	
							Silty clay with dark staining from 18.5 to 20 feet	0	
20				CL-ML		2.5Y-4/3	Silty clay, olive brown, moist, firm, low plasticity	0	Grab groundwater sample collected using peristaltic pump. Screened from 19 to 24 feet.
								0	
			45 / 48					0	
								0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
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FIELD AND LABORATORY TEST ABBREVIATIONS

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PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

SILTY CLAY (CL-ML)

SILT, SILT w/SAND, SANDY SILT (ML)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

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Project: **Dublin Parcel 16A**

Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**

Project Number: **0002.006.004**

Log of Boring SB-6

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **20 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~17.5 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Southern portion of site, adjacent to SB-5 and SB-7.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				CL-ML		10YR-2/2	Silty clay with minor gravel, very dark brown, dry to moist, firm, low plasticity		Hand augered to 5 feet bgs.
		3-3.5					Salted root channels from 3 to 5 feet	0	
5			46 / 36					0 0 0	
				CL		10YR-4/2 10YR-4/3	Dark grayish brown, roots at 8.5 Clay, brown, moist, firm, medium plasticity	0	
10		10-10.5	44 / 48					0	
			23 / 48					0	
15				CL-ML		10YR-4/2	Silty clay, dry, dark grayish brown, no plasticity, roots	0	
				CL		10YR-4/4	Sandy clay, brown, moist to wet, firm to soft, low to medium plasticity, increasing sand with depth	0	Grab groundwater sample collected using peristaltic pump. Screened from 15 to 20 feet.
				SP-SC		10YR-4/4	Clayey sand, brown, saturated medium dense, medium coarse grained, poorly graded	0	
20				CL		10YR-4/4	Sandy clay, brown, wet, soft, low plasticity	0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
10 REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

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CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
Poorly graded SAND with Clay (SP-SC)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Log of Boring SB-7
Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **20 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~17 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Center of site, adjacent to SB-5 and SB-6.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0				CL-ML		10YR-2/2	Silty clay, very dark brown, dry to moist, firm, low plasticty, salt filled root channels		Hand augered to 5 feet bgs.
		3-3.5						0	
5			46 / 36					0	
						10YR-4/4	Brown, moist at 8 feet	0	
10		10-10.5	48 / 48					0	
				ML		10YR-3/1		0	
				CL		10YR-4/4	Clayey silt, very dark gray, dry, no plasticity, friable from 13 to 13.25 feet	0	
			39 / 48				Sandy clay, brown, moist, soft to very soft, low plasticity, increasing sand with depth	0	
15								0	
				SP-SC		10YR-4/4	Wet at 16.5 feet	0	Grab groundwater sample collected using peristaltic pump. Screened from 15 to 20 feet.
							Clayey sand, brown, wet, medium dense, fine to medium coarse, poorly graded	0	
			41 / 48	CL		10YR-4/4	Saturated 17 to 17.5 feet	0	
				SP-SC		10YR-4/4	Sandy clay, brown, moist, soft to very soft, low plasticity	0	
20							Sand with minor clay, brown, moist, medium dense, medium coarse, poorly graded	0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

1 Depth (feet): Depth in feet below the ground surface.
2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
5 USCS Symbol: USCS symbol of the subsurface material.
6 Graphic Log: Graphic depiction of the subsurface material encountered.
7 Munsell Soil-Color: Color of subsurface material according to Munsell soil-color charts.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
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FIELD AND LABORATORY TEST ABBREVIATIONS

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CONS: One-dimensional consolidation test
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SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
SILT, SILT w/SAND, SANDY SILT (ML)
Poorly graded SAND with Clay (SP-SC)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Log of Boring GGW-1
Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **20 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~19 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Eastern portion of site, adjacent to GGW-2 and SG-7.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0							Did not log material from 0 to 5 feet bgs.		Hand augered to 5 feet bgs.
5			46 / 36	CL-ML		10YR-2/2	Silty clay, very dark brown, dry to moist, hard, low plasticity, salt in root channels to 7 feet.	0 0 0 0	
						10YR-3/3	Dark brown at 8 feet	0 0 0	
10			47 / 48					0 0 0	
							Silty clay with gravel, dry, friable, gravel up to 0.25 inches from 12.5 to 13.5 feet	0	
			27 / 48	CL		10YR-4/6	Sandy clay, dark yellowish brown, moist, soft to very soft, low plasticity	0	
15								0	
			39 / 48					0 0 0	Grab groundwater sample collected using peristaltic pump. Screened from 15 to 20 feet bgs.
				SC		10YR-4/4	Clayey sand, brown, moist, dense, fine to medium coarse grained, poorly graded	0	
20								0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

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2 Sample Type: Type of soil sample collected at the depth interval shown.
3 Sample Number: Sample identification number.
4 Recovered (in) / Total (in): Inches of recovery / total inches of boring tubing.
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UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
Clayey SAND (SC)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
2-inch-OD unlined split spoon (SPT)
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Log of Boring GGW-2

Sheet 1 of 1

Date(s) Drilled **8/17/2012**	Logged By **K. Quan-Montgomery**	Checked By **L. Vigliotti**
Drilling Method **Direct Push**	Drill Bit Size/Type **2-inch Macrocore**	Total Depth of Borehole **20 feet bgs**
Drill Rig Type **M2.5 DP 12**	Drilling Contractor **Gregg Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **~19 feet bgs**	Sampling Method(s) **Hand Auger, Acetate Liner**	Hammer Data **N/A**
Borehole Backfill **cement grout**	Location **Eastern portion of site, adjacent to GGW-1 and SG-7.**	

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
0							Did not log material from 0 to 5 feet bgs.		Hand augered to 5 feet bgs.
5			40 / 36	CL-ML		10YR-2/2	Silty clay, very dark brown, moist, firm, low plasticity	0 0 0 0	
				CL		10YR-3/3	Clay with minor silt, dark brown, moist, firm, low plasticity	0 0 0 0 0	
10			46 / 48					0 0 0	
			46 / 48	CL-ML		10YR-3/4	Silty clay with sand, dark yellowish brown, moist, firm, low plasticity	0 0	
15								0 0	Grab groundwater sample collected using peristaltic pump. Screened from 15 to 20 feet bgs.
			46 / 48	CL-ML		10YR-4/2 2.5Y-4/3	Silty clay with gravel, dry, fine gravel, friable from ~17.5 to 18 feet Silty clay with sand, olive brown, moist, low to medium plasticity Silty clay with dark staining, moist from 18.5 to 19.5 feet	0 0 0	
20								0	
25									

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Project: **Dublin Parcel 16A**
Project Location: **Hacienda Drive and Dublin Boulevard, Dublin, California**
Project Number: **0002.006.004**

Key to Log of Boring

Sheet 1 of 1

Depth (feet)	Sample Type	Sample Number	Recovered (in) / Total (in)	USCS Symbol	Graphic Log	Munsell Soil-Color	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

COLUMN DESCRIPTIONS

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SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)

SILTY CLAY (CL-ML)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)
Direct push acetate liner
Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
Soil Sample for Lab Analysis
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Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
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GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Appendix B

Laboratory Analytical Data Reports

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-44033-1
Client Project/Site: Dublin Parcel 16A

For:
Terraphase Engineering Inc
1404 Franklin Street
Suite 600
Oakland, California 94612

Attn: Ms. Wendy Bellah

Authorized for release by:
8/27/2012 10:47:08 AM

Micah Smith
Project Manager I
micah.smith@testamericainc.com

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

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

Table of Contents

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Job ID: 720-44033-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-44033-1

Comments
No additional comments.

Receipt
The samples were received on 8/17/2012 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

GC/MS VOA
Method(s) 8015B: TheDiesel Range Organics (DRO) concentration reported for the following sample(s) is due to the presence of discrete peaks: SB-4-10 (720-44033-12).

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8015B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: SB-5-3 (720-44033-17).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Client Sample ID: SB-3-3 — Lab Sample ID: 720-44033-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.6		1.0		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-3-10 — Lab Sample ID: 720-44033-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.5		1.0		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-3 — Lab Sample ID: 720-44033-3

No Detections

Client Sample ID: SB-3-D — Lab Sample ID: 720-44033-4

No Detections

Client Sample ID: SB-2-3 — Lab Sample ID: 720-44033-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.1		0.99		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-2-10 — Lab Sample ID: 720-44033-6

No Detections

Client Sample ID: SB-2 — Lab Sample ID: 720-44033-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	76		62		ug/L	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	140		120		ug/L	1		8015B	Total/NA

Client Sample ID: SB-1-3 — Lab Sample ID: 720-44033-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.4		1.0		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-1-10 — Lab Sample ID: 720-44033-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.5		0.98		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-1 — Lab Sample ID: 720-44033-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	98		62		ug/L	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	200		120		ug/L	1		8015B	Total/NA

Client Sample ID: SB-4-3 — Lab Sample ID: 720-44033-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.6		1.0		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-4-10 — Lab Sample ID: 720-44033-12

Client Sample ID: SB-4-10 (Continued) — Lab Sample ID: 720-44033-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.2		0.99		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-4 — Lab Sample ID: 720-44033-13

No Detections

Client Sample ID: SB-6-3 — Lab Sample ID: 720-44033-14

No Detections

Client Sample ID: SB-6-10 — Lab Sample ID: 720-44033-15

No Detections

Client Sample ID: SB-6 — Lab Sample ID: 720-44033-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	130		62		ug/L	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	210		120		ug/L	1		8015B	Total/NA

Client Sample ID: SB-5-3 — Lab Sample ID: 720-44033-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	300		9.9		mg/Kg	10		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	1300		500		mg/Kg	10		8015B	Total/NA

Client Sample ID: SB-5-10 — Lab Sample ID: 720-44033-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.4		1.0		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-5 — Lab Sample ID: 720-44033-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	93		62		ug/L	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	350		120		ug/L	1		8015B	Total/NA

Client Sample ID: SB-7-3 — Lab Sample ID: 720-44033-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	4.5		0.99		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-7-10 — Lab Sample ID: 720-44033-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	2.4		1.0		mg/Kg	1		8015B	Total/NA

Client Sample ID: SB-7 — Lab Sample ID: 720-44033-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	190		62		ug/L	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	360		120		ug/L	1		8015B	Total/NA

Detection Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Client Sample ID: GGW-1 **Lab Sample ID: 720-44033-24**

No Detections

Client Sample ID: GGW-2 **Lab Sample ID: 720-44033-25**

No Detections

Client Sample ID: EB-08-17-12 **Lab Sample ID: 720-44033-27**

No Detections

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: SB-3-3
Date Collected: 08/17/12 08:45
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2.6**		1.0		mg/Kg		08/22/12 07:35	08/23/12 20:44	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:35	08/23/12 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*109*		*40 - 130*	*08/22/12 07:35*	*08/23/12 20:44*	*1*

Client Sample ID: SB-3-10
Date Collected: 08/17/12 09:00
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.5**		1.0		mg/Kg		08/22/12 07:35	08/23/12 21:08	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:35	08/23/12 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*106*		*40 - 130*	*08/22/12 07:35*	*08/23/12 21:08*	*1*

Client Sample ID: SB-3
Date Collected: 08/17/12 09:05
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		62		ug/L		08/21/12 15:10	08/24/12 18:43	1
Motor Oil Range Organics [C24-C36]	ND		120		ug/L		08/21/12 15:10	08/24/12 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*23 - 156*	*08/21/12 15:10*	*08/24/12 18:43*	*1*

Client Sample ID: SB-3-D
Date Collected: 08/17/12 09:10
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/21/12 15:10	08/24/12 19:08	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		08/21/12 15:10	08/24/12 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*23 - 156*	*08/21/12 15:10*	*08/24/12 19:08*	*1*

Client Sample ID: SB-2-3
Date Collected: 08/17/12 09:20
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2.1**		0.99		mg/Kg		08/22/12 07:38	08/24/12 19:32	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		08/22/12 07:38	08/24/12 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*111*		*40 - 130*	*08/22/12 07:38*	*08/24/12 19:32*	*1*

Client Sample ID: SB-2-10
Date Collected: 08/17/12 09:40
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		08/22/12 07:38	08/24/12 19:57	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/24/12 19:57	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	102		40 - 130	08/22/12 07:38	08/24/12 19:57	1

Client Sample ID: SB-2
Date Collected: 08/17/12 09:50
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	76		62		ug/L		08/21/12 15:10	08/24/12 19:32	1
Motor Oil Range Organics [C24-C36]	140		120		ug/L		08/21/12 15:10	08/24/12 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	86		23 - 156	08/21/12 15:10	08/24/12 19:32	1

Client Sample ID: SB-1-3
Date Collected: 08/17/12 10:00
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-8
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.4		1.0		mg/Kg		08/22/12 07:38	08/24/12 20:21	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/24/12 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	115		40 - 130	08/22/12 07:38	08/24/12 20:21	1

Client Sample ID: SB-1-10
Date Collected: 08/17/12 10:30
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.5		0.98		mg/Kg		08/22/12 07:38	08/24/12 20:45	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		08/22/12 07:38	08/24/12 20:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	106		40 - 130	08/22/12 07:38	08/24/12 20:45	1

Client Sample ID: SB-1
Date Collected: 08/17/12 10:40
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	98		62		ug/L		08/21/12 15:10	08/24/12 19:57	1
Motor Oil Range Organics [C24-C36]	200		120		ug/L		08/21/12 15:10	08/24/12 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	90		23 - 156	08/21/12 15:10	08/24/12 19:57	1

Client Sample ID: SB-4-3
Date Collected: 08/17/12 10:50
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.6		1.0		mg/Kg		08/22/12 07:38	08/24/12 21:10	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/24/12 21:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	113		40 - 130	08/22/12 07:38	08/24/12 21:10	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: SB-4-10
Date Collected: 08/17/12 11:15
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-12
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2.2**		0.99		mg/Kg		08/22/12 07:38	08/24/12 21:34	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		08/22/12 07:38	08/24/12 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*109*		*40 - 130*	*08/22/12 07:38*	*08/24/12 21:34*	*1*

Client Sample ID: SB-4
Date Collected: 08/17/12 11:20
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		62		ug/L		08/21/12 15:10	08/24/12 20:21	1
Motor Oil Range Organics [C24-C36]	ND		120		ug/L		08/21/12 15:10	08/24/12 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*23 - 156*	*08/21/12 15:10*	*08/24/12 20:21*	*1*

Client Sample ID: SB-6-3
Date Collected: 08/17/12 11:40
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		08/22/12 07:38	08/24/12 21:59	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/24/12 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*119*		*40 - 130*	*08/22/12 07:38*	*08/24/12 21:59*	*1*

Client Sample ID: SB-6-10
Date Collected: 08/17/12 11:50
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		08/22/12 07:38	08/25/12 01:14	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/25/12 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*105*		*40 - 130*	*08/22/12 07:38*	*08/25/12 01:14*	*1*

Client Sample ID: SB-6
Date Collected: 08/17/12 12:00
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**130**		62		ug/L		08/21/12 15:10	08/24/12 20:45	1
Motor Oil Range Organics [C24-C36]	**210**		120		ug/L		08/21/12 15:10	08/24/12 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*83*		*23 - 156*	*08/21/12 15:10*	*08/24/12 20:45*	*1*

Client Sample ID: SB-5-3
Date Collected: 08/17/12 13:00
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-17
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**300**		9.9		mg/Kg		08/22/12 07:38	08/24/12 22:23	10
Motor Oil Range Organics [C24-C36]	**1300**		500		mg/Kg		08/22/12 07:38	08/24/12 22:23	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	X D	40 - 130	08/22/12 07:38	08/24/12 22:23	10

Client Sample ID: SB-5-10
Date Collected: 08/17/12 13:10
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-18
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2.4**		1.0		mg/Kg		08/22/12 07:38	08/25/12 12:18	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/25/12 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	115		40 - 130	08/22/12 07:38	08/25/12 12:18	1

Client Sample ID: SB-5
Date Collected: 08/17/12 13:20
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**93**		62		ug/L		08/21/12 15:10	08/25/12 13:56	1
Motor Oil Range Organics [C24-C36]	**350**		120		ug/L		08/21/12 15:10	08/25/12 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	93		23 - 156	08/21/12 15:10	08/25/12 13:56	1

Client Sample ID: SB-7-3
Date Collected: 08/17/12 13:40
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-21
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**4.5**		0.99		mg/Kg		08/22/12 07:38	08/25/12 12:42	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		08/22/12 07:38	08/25/12 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	106		40 - 130	08/22/12 07:38	08/25/12 12:42	1

Client Sample ID: SB-7-10
Date Collected: 08/17/12 13:50
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-22
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2.4**		1.0		mg/Kg		08/22/12 07:38	08/25/12 13:07	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/25/12 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	115		40 - 130	08/22/12 07:38	08/25/12 13:07	1

Client Sample ID: SB-7
Date Collected: 08/17/12 13:55
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-23
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**190**		62		ug/L		08/21/12 15:10	08/24/12 21:10	1
Motor Oil Range Organics [C24-C36]	**360**		120		ug/L		08/21/12 15:10	08/24/12 21:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	69		23 - 156	08/21/12 15:10	08/24/12 21:10	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: GGW-1
Date Collected: 08/17/12 14:25
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-24
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/21/12 15:10	08/24/12 21:34	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		08/21/12 15:10	08/24/12 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*86*		*23 - 156*	*08/21/12 15:10*	*08/24/12 21:34*	*1*

Client Sample ID: GGW-2
Date Collected: 08/17/12 14:50
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-25
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52		ug/L		08/21/12 15:10	08/24/12 21:59	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		08/21/12 15:10	08/24/12 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*107*		*23 - 156*	*08/21/12 15:10*	*08/24/12 21:59*	*1*

Client Sample ID: EB-08-17-12
Date Collected: 08/17/12 15:05
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-27
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		53		ug/L		08/21/12 15:10	08/25/12 01:14	1
Motor Oil Range Organics [C24-C36]	ND		110		ug/L		08/21/12 15:10	08/25/12 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*23 - 156*	*08/21/12 15:10*	*08/25/12 01:14*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-119503/1-A
Matrix: Water
Analysis Batch: 119688

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 119503

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		08/21/12 15:10	08/24/12 23:36	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		08/21/12 15:10	08/24/12 23:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*105*		*23 - 156*	*08/21/12 15:10*	*08/24/12 23:36*	*1*

Lab Sample ID: LCS 720-119503/2-A
Matrix: Water
Analysis Batch: 119688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 119503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	2140		ug/L		86	40 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*128*		*23 - 156*

Lab Sample ID: LCSD 720-119503/3-A
Matrix: Water
Analysis Batch: 119688

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 119503

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	2010		ug/L		80	40 - 150	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*103*		*23 - 156*

Lab Sample ID: MB 720-119540/1-A
Matrix: Solid
Analysis Batch: 119625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 119540

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		08/22/12 07:35	08/23/12 14:05	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:35	08/23/12 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*110*		*40 - 130*	*08/22/12 07:35*	*08/23/12 14:05*	*1*

Lab Sample ID: LCS 720-119540/2-A
Matrix: Solid
Analysis Batch: 119625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 119540

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	83.3	65.0		mg/Kg		78	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*87*		*40 - 130*

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

Lab Sample ID: LCSD 720-119540/3-A
Matrix: Solid
Analysis Batch: 119625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 119540

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			83.3	61.6		mg/Kg		74	50 - 150	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*82*		*40 - 130*

Lab Sample ID: MB 720-119541/1-A
Matrix: Solid
Analysis Batch: 119689

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 119541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		08/22/12 07:38	08/24/12 23:36	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		08/22/12 07:38	08/24/12 23:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*118*		*40 - 130*	*08/22/12 07:38*	*08/24/12 23:36*	*1*

Lab Sample ID: LCS 720-119541/2-A
Matrix: Solid
Analysis Batch: 119689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 119541

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			83.0	65.6		mg/Kg		79	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*85*		*40 - 130*

Lab Sample ID: LCSD 720-119541/3-A
Matrix: Solid
Analysis Batch: 119689

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 119541

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			83.1	67.4		mg/Kg		81	50 - 150	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*85*		*40 - 130*

GC Semi VOA

Prep Batch: 119503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-3	SB-3	Total/NA	Water	3510C	
720-44033-4	SB-3-D	Total/NA	Water	3510C	
720-44033-7	SB-2	Total/NA	Water	3510C	
720-44033-10	SB-1	Total/NA	Water	3510C	
720-44033-13	SB-4	Total/NA	Water	3510C	
720-44033-16	SB-6	Total/NA	Water	3510C	
720-44033-20	SB-5	Total/NA	Water	3510C	
720-44033-23	SB-7	Total/NA	Water	3510C	
720-44033-24	GGW-1	Total/NA	Water	3510C	
720-44033-25	GGW-2	Total/NA	Water	3510C	
720-44033-27	EB-08-17-12	Total/NA	Water	3510C	
LCS 720-119503/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-119503/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-119503/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 119540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-1	SB-3-3	Total/NA	Solid	3546	
720-44033-2	SB-3-10	Total/NA	Solid	3546	
LCS 720-119540/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-119540/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-119540/1-A	Method Blank	Total/NA	Solid	3546	

Prep Batch: 119541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-5	SB-2-3	Total/NA	Solid	3546	
720-44033-6	SB-2-10	Total/NA	Solid	3546	
720-44033-8	SB-1-3	Total/NA	Solid	3546	
720-44033-9	SB-1-10	Total/NA	Solid	3546	
720-44033-11	SB-4-3	Total/NA	Solid	3546	
720-44033-12	SB-4-10	Total/NA	Solid	3546	
720-44033-14	SB-6-3	Total/NA	Solid	3546	
720-44033-15	SB-6-10	Total/NA	Solid	3546	
720-44033-17	SB-5-3	Total/NA	Solid	3546	
720-44033-18	SB-5-10	Total/NA	Solid	3546	
720-44033-21	SB-7-3	Total/NA	Solid	3546	
720-44033-22	SB-7-10	Total/NA	Solid	3546	
LCS 720-119541/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-119541/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-119541/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 119625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-1	SB-3-3	Total/NA	Solid	8015B	119540
720-44033-2	SB-3-10	Total/NA	Solid	8015B	119540
LCS 720-119540/2-A	Lab Control Sample	Total/NA	Solid	8015B	119540
LCSD 720-119540/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	119540
MB 720-119540/1-A	Method Blank	Total/NA	Solid	8015B	119540

Analysis Batch: 119688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-3	SB-3	Total/NA	Water	8015B	119503

GC Semi VOA (Continued)

Analysis Batch: 119688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-4	SB-3-D	Total/NA	Water	8015B	119503
720-44033-7	SB-2	Total/NA	Water	8015B	119503
720-44033-10	SB-1	Total/NA	Water	8015B	119503
720-44033-13	SB-4	Total/NA	Water	8015B	119503
720-44033-16	SB-6	Total/NA	Water	8015B	119503
720-44033-23	SB-7	Total/NA	Water	8015B	119503
720-44033-24	GGW-1	Total/NA	Water	8015B	119503
720-44033-25	GGW-2	Total/NA	Water	8015B	119503
720-44033-27	EB-08-17-12	Total/NA	Water	8015B	119503
LCS 720-119503/2-A	Lab Control Sample	Total/NA	Water	8015B	119503
LCSD 720-119503/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	119503
MB 720-119503/1-A	Method Blank	Total/NA	Water	8015B	119503

Analysis Batch: 119689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-5	SB-2-3	Total/NA	Solid	8015B	119541
720-44033-6	SB-2-10	Total/NA	Solid	8015B	119541
720-44033-8	SB-1-3	Total/NA	Solid	8015B	119541
720-44033-9	SB-1-10	Total/NA	Solid	8015B	119541
720-44033-11	SB-4-3	Total/NA	Solid	8015B	119541
720-44033-12	SB-4-10	Total/NA	Solid	8015B	119541
720-44033-14	SB-6-3	Total/NA	Solid	8015B	119541
720-44033-15	SB-6-10	Total/NA	Solid	8015B	119541
720-44033-17	SB-5-3	Total/NA	Solid	8015B	119541
LCS 720-119541/2-A	Lab Control Sample	Total/NA	Solid	8015B	119541
LCSD 720-119541/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	119541
MB 720-119541/1-A	Method Blank	Total/NA	Solid	8015B	119541

Analysis Batch: 119762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-44033-18	SB-5-10	Total/NA	Solid	8015B	119541
720-44033-20	SB-5	Total/NA	Water	8015B	119503
720-44033-21	SB-7-3	Total/NA	Solid	8015B	119541
720-44033-22	SB-7-10	Total/NA	Solid	8015B	119541

Lab Chronicle

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Client Sample ID: SB-3-3
Date Collected: 08/17/12 08:45
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119540	08/22/12 07:35	NP	TAL SF
Total/NA	Analysis	8015B		1	119625	08/23/12 20:44	JZ	TAL SF

Client Sample ID: SB-3-10
Date Collected: 08/17/12 09:00
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119540	08/22/12 07:35	NP	TAL SF
Total/NA	Analysis	8015B		1	119625	08/23/12 21:08	JZ	TAL SF

Client Sample ID: SB-3
Date Collected: 08/17/12 09:05
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 18:43	JZ	TAL SF

Client Sample ID: SB-3-D
Date Collected: 08/17/12 09:10
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 19:08	JZ	TAL SF

Client Sample ID: SB-2-3
Date Collected: 08/17/12 09:20
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 19:32	JZ	TAL SF

Client Sample ID: SB-2-10
Date Collected: 08/17/12 09:40
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 19:57	JZ	TAL SF

Lab Chronicle

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Client Sample ID: SB-2

Lab Sample ID: 720-44033-7

Date Collected: 08/17/12 09:50
Matrix: Water
Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 19:32	JZ	TAL SF

Client Sample ID: SB-1-3

Lab Sample ID: 720-44033-8

Date Collected: 08/17/12 10:00
Matrix: Solid
Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 20:21	JZ	TAL SF

Client Sample ID: SB-1-10

Lab Sample ID: 720-44033-9

Date Collected: 08/17/12 10:30
Matrix: Solid
Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 20:45	JZ	TAL SF

Client Sample ID: SB-1

Lab Sample ID: 720-44033-10

Date Collected: 08/17/12 10:40
Matrix: Water
Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 19:57	JZ	TAL SF

Client Sample ID: SB-4-3

Lab Sample ID: 720-44033-11

Date Collected: 08/17/12 10:50
Matrix: Solid
Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 21:10	JZ	TAL SF

Client Sample ID: SB-4-10

Lab Sample ID: 720-44033-12

Date Collected: 08/17/12 11:15
Matrix: Solid
Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 21:34	JZ	TAL SF

Client Sample ID: SB-4

Lab Sample ID: 720-44033-13

Date Collected: 08/17/12 11:20

Matrix: Water

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 20:21	JZ	TAL SF

Client Sample ID: SB-6-3

Lab Sample ID: 720-44033-14

Date Collected: 08/17/12 11:40

Matrix: Solid

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/24/12 21:59	JZ	TAL SF

Client Sample ID: SB-6-10

Lab Sample ID: 720-44033-15

Date Collected: 08/17/12 11:50

Matrix: Solid

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119689	08/25/12 01:14	JZ	TAL SF

Client Sample ID: SB-6

Lab Sample ID: 720-44033-16

Date Collected: 08/17/12 12:00

Matrix: Water

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 20:45	JZ	TAL SF

Client Sample ID: SB-5-3

Lab Sample ID: 720-44033-17

Date Collected: 08/17/12 13:00

Matrix: Solid

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		10	119689	08/24/12 22:23	JZ	TAL SF

Client Sample ID: SB-5-10

Lab Sample ID: 720-44033-18

Date Collected: 08/17/12 13:10

Matrix: Solid

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119762	08/25/12 12:18	JZ	TAL SF

Lab Chronicle

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Client Sample ID: SB-5

Lab Sample ID: 720-44033-20

Date Collected: 08/17/12 13:20

Matrix: Water

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119762	08/25/12 13:56	JZ	TAL SF

Client Sample ID: SB-7-3

Lab Sample ID: 720-44033-21

Date Collected: 08/17/12 13:40

Matrix: Solid

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119762	08/25/12 12:42	JZ	TAL SF

Client Sample ID: SB-7-10

Lab Sample ID: 720-44033-22

Date Collected: 08/17/12 13:50

Matrix: Solid

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			119541	08/22/12 07:38	NP	TAL SF
Total/NA	Analysis	8015B		1	119762	08/25/12 13:07	JZ	TAL SF

Client Sample ID: SB-7

Lab Sample ID: 720-44033-23

Date Collected: 08/17/12 13:55

Matrix: Water

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 21:10	JZ	TAL SF

Client Sample ID: GGW-1

Lab Sample ID: 720-44033-24

Date Collected: 08/17/12 14:25

Matrix: Water

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 21:34	JZ	TAL SF

Client Sample ID: GGW-2

Lab Sample ID: 720-44033-25

Date Collected: 08/17/12 14:50

Matrix: Water

Date Received: 08/17/12 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/24/12 21:59	JZ	TAL SF

Lab Chronicle

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Client Sample ID: EB-08-17-12
Date Collected: 08/17/12 15:05
Date Received: 08/17/12 15:50

Lab Sample ID: 720-44033-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			119503	08/21/12 15:10	RU	TAL SF
Total/NA	Analysis	8015B		1	119688	08/25/12 01:14	JZ	TAL SF

Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

Method Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

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

Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 720-44033-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-44033-1	SB-3-3	Solid	08/17/12 08:45	08/17/12 15:50
720-44033-2	SB-3-10	Solid	08/17/12 09:00	08/17/12 15:50
720-44033-3	SB-3	Water	08/17/12 09:05	08/17/12 15:50
720-44033-4	SB-3-D	Water	08/17/12 09:10	08/17/12 15:50
720-44033-5	SB-2-3	Solid	08/17/12 09:20	08/17/12 15:50
720-44033-6	SB-2-10	Solid	08/17/12 09:40	08/17/12 15:50
720-44033-7	SB-2	Water	08/17/12 09:50	08/17/12 15:50
720-44033-8	SB-1-3	Solid	08/17/12 10:00	08/17/12 15:50
720-44033-9	SB-1-10	Solid	08/17/12 10:30	08/17/12 15:50
720-44033-10	SB-1	Water	08/17/12 10:40	08/17/12 15:50
720-44033-11	SB-4-3	Solid	08/17/12 10:50	08/17/12 15:50
720-44033-12	SB-4-10	Solid	08/17/12 11:15	08/17/12 15:50
720-44033-13	SB-4	Water	08/17/12 11:20	08/17/12 15:50
720-44033-14	SB-6-3	Solid	08/17/12 11:40	08/17/12 15:50
720-44033-15	SB-6-10	Solid	08/17/12 11:50	08/17/12 15:50
720-44033-16	SB-6	Water	08/17/12 12:00	08/17/12 15:50
720-44033-17	SB-5-3	Solid	08/17/12 13:00	08/17/12 15:50
720-44033-18	SB-5-10	Solid	08/17/12 13:10	08/17/12 15:50
720-44033-20	SB-5	Water	08/17/12 13:20	08/17/12 15:50
720-44033-21	SB-7-3	Solid	08/17/12 13:40	08/17/12 15:50
720-44033-22	SB-7-10	Solid	08/17/12 13:50	08/17/12 15:50
720-44033-23	SB-7	Water	08/17/12 13:55	08/17/12 15:50
720-44033-24	GGW-1	Water	08/17/12 14:25	08/17/12 15:50
720-44033-25	GGW-2	Water	08/17/12 14:50	08/17/12 15:50
720-44033-27	EB-08-17-12	Water	08/17/12 15:05	08/17/12 15:50

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

720-44033

Reference #: 140249

Date 08/17/12 Page 1 of 3

8/27/2012

Report To

Attn: Wendy Bellah
Company: Terraphase
Address: 1404 Franklin St. Suite 600, Oakland
Phone: 510-645-1850 Email: wendy.bellah@terraphase.com
Bill To:
Sampled By: Kara Chan-Montgomery
Attn:
Phone: 510-301-2093

Analysis Request

Sample ID	Date	Time	Mat'l	Preserv.	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☐ Silica Gel ☑ Diesel ☑ Motor Oil ☐ Other ___	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___	☐ W.E.T (STLC) ☐ TCLP	☐ Hex. Chrom.(Specify Method) ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
SB-3-3	8/17/12	0845	S	None		✓																				1
SB-3-10		0900	S			✓																				1
SB-3		0905	W			✓																				2
SB-3-D		0910	W			✓																				2
SB-2-3		0920	S			✓																				1
SB-2-10		0940	S			✓																				1
SB-2		0950	W			✓																				2
SB-1-3		1000	S			✓																				1
SB-1-10		1030	S			✓																				1
SB-1		1040	W			✓																				2

Project Info

Project Name: Dublin Parcel 16A
Project#: 0002.006.004
PO#:
Credit Card#:

Sample Receipt

of Containers: 39
Head Space:
Temp: 2.1°C/4.5°
Conforms to record:

TAT: (5 Day) 3 Day 2 Day 1 Day
Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank
Fund EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Kara [illegible] Time: 1550	Signature: Time:	Signature: Time:
Printed Name: Kara Quan-Montgomery Date: 8/17/12	Printed Name: Date:	Printed Name: Date:
Company: Terraphase	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: Joan Mullen Time: 1550	Signature: Time:	Signature: Time:
Printed Name: Mullen Date: 8-17-12	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Company:

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone (925) 484-1919 • Fax (925) 600-3002

720-44033

Reference #: 140249

Date 8/17/12 Page 2 of 3

8/27/2012

Report To

Attn: Wendy Bellah
Company: Terraphase
Address: 1404 Franklin St., Ste 600, Oakland
Phone: 510-645-1850 Email: wendy.bellah@terraphase.com
Bill To:
Sampled By: Kara Q-M
Attn:
Phone: 510-301-2093

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☐ Silica Gel ☑ Diesel ☑ Motor Oil ☐ Other	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	☐ Hex. Chrom.(Specify Method) ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
SB-4-3	8/17/12	1050	S	None		✓																			4
SB-4-10		1115	S			✓																			1
SB-4		1120	W			✓																			2
SB-6-3		1140	S			✓																			1
SB-6-10		1150	S			✓																			1
SB-6		1200	W			✓																			2
SB-5-3		1300	S			✓																			1
SB-5-10		1310	S			✓																			1
SB-5-19		1325	S			HOLD																			1
SB-5		1320	W			✓																			2

Project Info

Project Name: Dublin Parcel 16A
Project#: 0002.006.004
PO#:
Credit Card#:

Sample Receipt

of Containers: 39
Head Space:
Temp: 2.1° / 4.5°
Conforms to record:

TAT: (5 Day) 3 Day 2 Day 1 Day
Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse
TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Kara Q-M 1550	Signature:	Signature:
Time	Time	Time
Printed Name: Kara Qun-Montgom 8/17/12	Printed Name:	Printed Name:
Date	Date	Date
Company: Terraphase	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: Tom Muller 1550	Signature:	Signature:
Time	Time	Time
Printed Name: Muller 8-17-12	Printed Name:	Printed Name:
Date	Date	Date
Company:	Company:	Company:

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: 925/600-0002

Reference #: 140249
170-44033

Date 8/17/12 Page 3 of 3

8/27/2012

Report To

Attn: Wendy Bellah
Company: Terraphase
Address: 1A0A Franklin St. Ste. 600, Oakland
Phone: 510-645-1850 Email: wendy.bellah@terraphase.com
Bill To:
Sampled By: KQM
Attn:
Phone: 5103012093

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	TPH EPA - ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	TEPH EPA 8015M* ☐ Silica Gel ☑ Diesel ☑ Motor Oil ☐ Other ___	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	(HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Low Level Metals by EPA 200.8/6020 (ICP-MS): ___	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
SB-7-3	8/17/12	1340	S	None		✓																				1
SB-7-10		1350	S			✓																				1
SB-7		1355	W			✓																				2
GGW-1		1425	W			✓																				2
GGW-2		1450	W			✓																				2
GGW-2-23		1500	S		HOLD																					1
EB-08-17-12		1505	W			✓																				2
Drum-08-17-12		1515	S		HOLD																					1

Project Info.

Project Name:
Project#:
PO#:
Credit Card#:

Sample Receipt

of Containers: 39
Head Space:
Temp: 2.1i/4.5c°
Conforms to record:

TAT: 5 Day (3 Day, 2 Day, 1 Day) Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank
Fund EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1550	Signature: Time:	Signature: Time:
Printed Name: Kara Qian-Montgomery Date: 8/17/12	Printed Name: Date:	Printed Name: Date:
Company: Terraphase	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1550	Signature: Time:	Signature: Time:
Printed Name: Mullen Date: 8-17-12	Printed Name: Date:	Printed Name: Date:
Company: [signature]	Company:	Company:

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Login Sample Receipt Checklist

Client: Terraphase Engineering Inc

Job Number: 720-44033-1

Login Number: 44033
List Number: 1
Creator: Mullen, Joan

List Source: TestAmerica Pleasanton

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Costa Mesa
3585 Cadillac Ave
Suite A
Costa Mesa, CA 92626
Tel: (714)258-8610

TestAmerica Job ID: 340-3569-1
Client Project/Site: Dublin Parcel 16A

For:
Terraphase Engineering Inc
1404 Franklin Street
Suite 600
Oakland, California 94612

Attn: Ms. Wendy Bellah

Beth Riley

Authorized for release by:
8/28/2012 12:20:24 PM

Beth Riley
Customer Service Manager
beth.riley@testamericainc.com

Table of Contents

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 340-3569-1

Laboratory: TestAmerica Costa Mesa

Narrative

Job Narrative
340-3569-1

Receipt
The samples were received on 8/21/2012 10:30 AM; the samples arrived in good condition.

Air - GC VOA
No analytical or quality issues were noted.

Air - GC/MS VOA
Method(s) TO-15: The continuing calibration verification (CCV) for Benzyl Chloride (36.5%) associated with batch 2481 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) TO-15: Elevated reporting limits are provided for the following samples due to insufficient sample provided for re-analysis: SG-2 (340-3569-5), SG-5 (340-3569-3), SG-6 (340-3569-2). The initial analysis at 1X dilution had internal standard areas outside the acceptance limits due to high levels of not target conmpounds.

Method(s) TO-15: The continuing calibration verification (CCV) for Benzyl Chloride (34.0%) associated with batch 2486 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) TO-15: Elevated reporting limits are provided for the following sample due to insufficient sample provided for re-analysis: SG-3 (340-3569-6). The initial analysis at 1X dilution had internal standard areas outside the acceptance limits due to high levels of not target compounds.

Method(s) TO-15: Internal standard (ISTD) response for the following sample was outside control limits: SG-4 (340-3569-7). The sample was re-analyzed with concurring results. The original set of data has been reported.

No other analytical or quality issues were noted.

Client Sample ID: SG-7 — Lab Sample ID: 340-3569-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.8		0.80		ppb v/v	1		TO-15	Total/NA
Benzene	0.93		0.30		ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	1.2		0.80		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.48		0.40		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18		1.9		ug/m3	1		TO-15	Total/NA
Benzene	3.0		0.96		ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	3.5		2.4		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4		2.0		ug/m3	1		TO-15	Total/NA

Client Sample ID: SG-6 — Lab Sample ID: 340-3569-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane (FID)	0.0027		0.00088		% v/v	2.2		D1946	Total/NA
Acetone	7.1		2.0		ppb v/v	2.53		TO-15	Total/NA
Benzene	3.6		0.76		ppb v/v	2.53		TO-15	Total/NA
Carbon disulfide	25		2.0		ppb v/v	2.53		TO-15	Total/NA
Chloroform	0.90		0.76		ppb v/v	2.53		TO-15	Total/NA
Tetrachloroethene	1.0		1.0		ppb v/v	2.53		TO-15	Total/NA
Toluene	1.2		1.0		ppb v/v	2.53		TO-15	Total/NA
Trichlorofluoromethane	4.8		1.0		ppb v/v	2.53		TO-15	Total/NA
m,p-Xylene	2.3		2.0		ppb v/v	2.53		TO-15	Total/NA
o-Xylene	1.4		1.0		ppb v/v	2.53		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	17		4.8		ug/m3	2.53		TO-15	Total/NA
Benzene	11		2.4		ug/m3	2.53		TO-15	Total/NA
Carbon disulfide	76		6.3		ug/m3	2.53		TO-15	Total/NA
Chloroform	4.4		3.7		ug/m3	2.53		TO-15	Total/NA
Tetrachloroethene	7.0		6.9		ug/m3	2.53		TO-15	Total/NA
Toluene	4.6		3.8		ug/m3	2.53		TO-15	Total/NA
Trichlorofluoromethane	27		5.7		ug/m3	2.53		TO-15	Total/NA
m,p-Xylene	9.9		8.8		ug/m3	2.53		TO-15	Total/NA
o-Xylene	6.0		4.4		ug/m3	2.53		TO-15	Total/NA

Client Sample ID: SG-5 — Lab Sample ID: 340-3569-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18		1.4		ppb v/v	1.72		TO-15	Total/NA
Benzene	1.2		0.52		ppb v/v	1.72		TO-15	Total/NA
2-Butanone (MEK)	2.6		1.4		ppb v/v	1.72		TO-15	Total/NA
4-Ethyltoluene	0.71		0.69		ppb v/v	1.72		TO-15	Total/NA
2-Hexanone	0.78		0.69		ppb v/v	1.72		TO-15	Total/NA
4-Methyl-2-pentanone (MIBK)	0.88		0.69		ppb v/v	1.72		TO-15	Total/NA
Tetrachloroethene	5.5		0.69		ppb v/v	1.72		TO-15	Total/NA
Toluene	0.76		0.69		ppb v/v	1.72		TO-15	Total/NA
m,p-Xylene	1.6		1.4		ppb v/v	1.72		TO-15	Total/NA
o-Xylene	0.80		0.69		ppb v/v	1.72		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	43		3.3		ug/m3	1.72		TO-15	Total/NA
Benzene	3.9		1.6		ug/m3	1.72		TO-15	Total/NA
2-Butanone (MEK)	7.5		4.1		ug/m3	1.72		TO-15	Total/NA
4-Ethyltoluene	3.5		3.4		ug/m3	1.72		TO-15	Total/NA
2-Hexanone	3.2		2.8		ug/m3	1.72		TO-15	Total/NA

Client Sample ID: SG-5 (Continued) — Lab Sample ID: 340-3569-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	3.6		2.8		ug/m3	1.72		TO-15	Total/NA
Tetrachloroethene	37		4.7		ug/m3	1.72		TO-15	Total/NA
Toluene	2.9		2.6		ug/m3	1.72		TO-15	Total/NA
m,p-Xylene	7.0		6.0		ug/m3	1.72		TO-15	Total/NA
o-Xylene	3.5		3.0		ug/m3	1.72		TO-15	Total/NA

Client Sample ID: SG-1 — Lab Sample ID: 340-3569-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13		0.80		ppb v/v	1		TO-15	Total/NA
Benzene	2.0		0.30		ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	1.5		0.80		ppb v/v	1		TO-15	Total/NA
Carbon disulfide	2.4		0.80		ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.93		0.40		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.45		0.40		ppb v/v	1		TO-15	Total/NA
2-Hexanone	0.42		0.40		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	29		0.40		ppb v/v	1		TO-15	Total/NA
Toluene	0.94		0.40		ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.86		0.80		ppb v/v	1		TO-15	Total/NA
o-Xylene	0.41		0.40		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	30		1.9		ug/m3	1		TO-15	Total/NA
Benzene	6.2		0.96		ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	4.3		2.4		ug/m3	1		TO-15	Total/NA
Carbon disulfide	7.6		2.5		ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	5.6		2.4		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.2		2.0		ug/m3	1		TO-15	Total/NA
2-Hexanone	1.7		1.6		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	200		2.7		ug/m3	1		TO-15	Total/NA
Toluene	3.5		1.5		ug/m3	1		TO-15	Total/NA
m,p-Xylene	3.8		3.5		ug/m3	1		TO-15	Total/NA
o-Xylene	1.8		1.7		ug/m3	1		TO-15	Total/NA

Client Sample ID: SG-2 — Lab Sample ID: 340-3569-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3		0.87		ppb v/v	2.9		TO-15	Total/NA
Carbon disulfide	2.6		2.3		ppb v/v	2.9		TO-15	Total/NA
1,3-Dichlorobenzene	1.2		1.2		ppb v/v	2.9		TO-15	Total/NA
Tetrachloroethene	3.3		1.2		ppb v/v	2.9		TO-15	Total/NA
Trichlorofluoromethane	1.4		1.2		ppb v/v	2.9		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.4		2.8		ug/m3	2.9		TO-15	Total/NA
Carbon disulfide	8.2		7.2		ug/m3	2.9		TO-15	Total/NA
1,3-Dichlorobenzene	7.1		7.0		ug/m3	2.9		TO-15	Total/NA
Tetrachloroethene	23		7.9		ug/m3	2.9		TO-15	Total/NA
Trichlorofluoromethane	7.7		6.5		ug/m3	2.9		TO-15	Total/NA

Client Sample ID: SG-3 — Lab Sample ID: 340-3569-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.7		1.8		ppb v/v	2.22		TO-15	Total/NA
Benzene	2.4		0.67		ppb v/v	2.22		TO-15	Total/NA

Client Sample ID: SG-3 (Continued) — Lab Sample ID: 340-3569-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	7.2		1.8		ppb v/v	2.22		TO-15	Total/NA
Chloroform	3.4		0.67		ppb v/v	2.22		TO-15	Total/NA
1,3-Dichlorobenzene	1.0		0.89		ppb v/v	2.22		TO-15	Total/NA
Tetrachloroethene	2.0		0.89		ppb v/v	2.22		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	23		4.2		ug/m3	2.22		TO-15	Total/NA
Benzene	7.5		2.1		ug/m3	2.22		TO-15	Total/NA
Carbon disulfide	23		5.5		ug/m3	2.22		TO-15	Total/NA
Chloroform	17		3.3		ug/m3	2.22		TO-15	Total/NA
1,3-Dichlorobenzene	6.2		5.3		ug/m3	2.22		TO-15	Total/NA
Tetrachloroethene	14		6.0		ug/m3	2.22		TO-15	Total/NA

Client Sample ID: SG-4 — Lab Sample ID: 340-3569-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	18		0.80		ppb v/v	1		TO-15	Total/NA
Benzene	0.90		0.30		ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	1.5		0.80		ppb v/v	1		TO-15	Total/NA
Carbon disulfide	2.0		0.80		ppb v/v	1		TO-15	Total/NA
Chlorobenzene	0.40		0.30		ppb v/v	1		TO-15	Total/NA
Chloroform	1.6		0.30		ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.96		0.40		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.44		0.40		ppb v/v	1		TO-15	Total/NA
2-Hexanone	0.47		0.40		ppb v/v	1		TO-15	Total/NA
Methylene chloride	1.6		0.40		ppb v/v	1		TO-15	Total/NA
Styrene	0.73		0.40		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	1.5		0.40		ppb v/v	1		TO-15	Total/NA
Toluene	4.5		0.40		ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.82		0.80		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	42		1.9		ug/m3	1		TO-15	Total/NA
Benzene	2.9		0.96		ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	4.3		2.4		ug/m3	1		TO-15	Total/NA
Carbon disulfide	6.4		2.5		ug/m3	1		TO-15	Total/NA
Chlorobenzene	1.8		1.4		ug/m3	1		TO-15	Total/NA
Chloroform	7.9		1.5		ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	5.8		2.4		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.2		2.0		ug/m3	1		TO-15	Total/NA
2-Hexanone	1.9		1.6		ug/m3	1		TO-15	Total/NA
Methylene chloride	5.4		1.4		ug/m3	1		TO-15	Total/NA
Styrene	3.1		1.7		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	10		2.7		ug/m3	1		TO-15	Total/NA
Toluene	17		1.5		ug/m3	1		TO-15	Total/NA
m,p-Xylene	3.5		3.5		ug/m3	1		TO-15	Total/NA

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-7
Date Collected: 08/20/12 10:51
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-1
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.044		% v/v			08/23/12 11:02	2.22
Methane (FID)	ND		0.00089		% v/v			08/23/12 11:02	2.22

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.8**		0.80		ppb v/v			08/25/12 16:12	1
Benzene	**0.93**		0.30		ppb v/v			08/25/12 16:12	1
Benzyl chloride	ND		0.80		ppb v/v			08/25/12 16:12	1
Bromodichloromethane	ND		0.30		ppb v/v			08/25/12 16:12	1
Bromoform	ND		0.40		ppb v/v			08/25/12 16:12	1
Bromomethane	ND		0.80		ppb v/v			08/25/12 16:12	1
2-Butanone (MEK)	**1.2**		0.80		ppb v/v			08/25/12 16:12	1
Carbon disulfide	ND		0.80		ppb v/v			08/25/12 16:12	1
Carbon tetrachloride	ND		0.80		ppb v/v			08/25/12 16:12	1
Chlorobenzene	ND		0.30		ppb v/v			08/25/12 16:12	1
Dibromochloromethane	ND		0.40		ppb v/v			08/25/12 16:12	1
Chloroethane	ND		0.80		ppb v/v			08/25/12 16:12	1
Chloroform	ND		0.30		ppb v/v			08/25/12 16:12	1
Chloromethane	ND		0.80		ppb v/v			08/25/12 16:12	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			08/25/12 16:12	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 16:12	1
1,3-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 16:12	1
1,4-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 16:12	1
Dichlorodifluoromethane	**0.48**		0.40		ppb v/v			08/25/12 16:12	1
1,1-Dichloroethane	ND		0.30		ppb v/v			08/25/12 16:12	1
1,2-Dichloroethane	ND		0.80		ppb v/v			08/25/12 16:12	1
1,1-Dichloroethene	ND		0.80		ppb v/v			08/25/12 16:12	1
cis-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 16:12	1
trans-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 16:12	1
1,2-Dichloropropane	ND		0.40		ppb v/v			08/25/12 16:12	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 16:12	1
trans-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 16:12	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40		ppb v/v			08/25/12 16:12	1
Ethylbenzene	ND		0.40		ppb v/v			08/25/12 16:12	1
4-Ethyltoluene	ND		0.40		ppb v/v			08/25/12 16:12	1
Hexachlorobutadiene	ND		0.40		ppb v/v			08/25/12 16:12	1
2-Hexanone	ND		0.40		ppb v/v			08/25/12 16:12	1
Methylene chloride	ND		0.40		ppb v/v			08/25/12 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.40		ppb v/v			08/25/12 16:12	1
Styrene	ND		0.40		ppb v/v			08/25/12 16:12	1
1,1,2,2-Tetrachloroethane	ND		0.40		ppb v/v			08/25/12 16:12	1
Tetrachloroethene	ND		0.40		ppb v/v			08/25/12 16:12	1
Toluene	ND		0.40		ppb v/v			08/25/12 16:12	1
1,2,4-Trichlorobenzene	ND		2.5		ppb v/v			08/25/12 16:12	1
1,1,1-Trichloroethane	ND		0.30		ppb v/v			08/25/12 16:12	1
1,1,2-Trichloroethane	ND		0.40		ppb v/v			08/25/12 16:12	1
Trichloroethene	ND		0.40		ppb v/v			08/25/12 16:12	1
Trichlorofluoromethane	ND		0.40		ppb v/v			08/25/12 16:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40		ppb v/v			08/25/12 16:12	1
1,2,4-Trimethylbenzene	ND		2.5		ppb v/v			08/25/12 16:12	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-7
Date Collected: 08/20/12 10:51
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			08/25/12 16:12	1
Vinyl acetate	ND		0.80		ppb v/v			08/25/12 16:12	1
Vinyl chloride	ND		0.20		ppb v/v			08/25/12 16:12	1
m,p-Xylene	ND		0.80		ppb v/v			08/25/12 16:12	1
o-Xylene	ND		0.40		ppb v/v			08/25/12 16:12	1
Naphthalene	ND		2.0		ppb v/v			08/25/12 16:12	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**18**		1.9		ug/m3			08/25/12 16:12	1
Benzene	**3.0**		0.96		ug/m3			08/25/12 16:12	1
Benzyl chloride	ND		4.1		ug/m3			08/25/12 16:12	1
Bromodichloromethane	ND		2.0		ug/m3			08/25/12 16:12	1
Bromoform	ND		4.1		ug/m3			08/25/12 16:12	1
Bromomethane	ND		3.1		ug/m3			08/25/12 16:12	1
2-Butanone (MEK)	**3.5**		2.4		ug/m3			08/25/12 16:12	1
Carbon disulfide	ND		2.5		ug/m3			08/25/12 16:12	1
Carbon tetrachloride	ND		5.0		ug/m3			08/25/12 16:12	1
Chlorobenzene	ND		1.4		ug/m3			08/25/12 16:12	1
Dibromochloromethane	ND		3.4		ug/m3			08/25/12 16:12	1
Chloroethane	ND		2.1		ug/m3			08/25/12 16:12	1
Chloroform	ND		1.5		ug/m3			08/25/12 16:12	1
Chloromethane	ND		1.7		ug/m3			08/25/12 16:12	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			08/25/12 16:12	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 16:12	1
1,3-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 16:12	1
1,4-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 16:12	1
Dichlorodifluoromethane	**2.4**		2.0		ug/m3			08/25/12 16:12	1
1,1-Dichloroethane	ND		1.2		ug/m3			08/25/12 16:12	1
1,2-Dichloroethane	ND		3.2		ug/m3			08/25/12 16:12	1
1,1-Dichloroethene	ND		3.2		ug/m3			08/25/12 16:12	1
cis-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 16:12	1
trans-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 16:12	1
1,2-Dichloropropane	ND		1.8		ug/m3			08/25/12 16:12	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 16:12	1
trans-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 16:12	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8		ug/m3			08/25/12 16:12	1
Ethylbenzene	ND		1.7		ug/m3			08/25/12 16:12	1
4-Ethyltoluene	ND		2.0		ug/m3			08/25/12 16:12	1
Hexachlorobutadiene	ND		4.3		ug/m3			08/25/12 16:12	1
2-Hexanone	ND		1.6		ug/m3			08/25/12 16:12	1
Methylene chloride	ND		1.4		ug/m3			08/25/12 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		1.6		ug/m3			08/25/12 16:12	1
Styrene	ND		1.7		ug/m3			08/25/12 16:12	1
1,1,2,2-Tetrachloroethane	ND		2.7		ug/m3			08/25/12 16:12	1
Tetrachloroethene	ND		2.7		ug/m3			08/25/12 16:12	1
Toluene	ND		1.5		ug/m3			08/25/12 16:12	1
1,2,4-Trichlorobenzene	ND		19		ug/m3			08/25/12 16:12	1
1,1,1-Trichloroethane	ND		1.6		ug/m3			08/25/12 16:12	1
1,1,2-Trichloroethane	ND		2.2		ug/m3			08/25/12 16:12	1
Trichloroethene	ND		2.1		ug/m3			08/25/12 16:12	1
Trichlorofluoromethane	ND		2.2		ug/m3			08/25/12 16:12	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-7
Date Collected: 08/20/12 10:51
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1		ug/m3			08/25/12 16:12	1
1,2,4-Trimethylbenzene	ND		12		ug/m3			08/25/12 16:12	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			08/25/12 16:12	1
Vinyl acetate	ND		2.8		ug/m3			08/25/12 16:12	1
Vinyl chloride	ND		0.51		ug/m3			08/25/12 16:12	1
m,p-Xylene	ND		3.5		ug/m3			08/25/12 16:12	1
o-Xylene	ND		1.7		ug/m3			08/25/12 16:12	1
Naphthalene	ND		10		ug/m3			08/25/12 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/25/12 16:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/25/12 16:12*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*08/25/12 16:12*	*1*

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-6
Date Collected: 08/20/12 10:30
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-2
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.044		% v/v			08/23/12 11:21	2.2
Methane (FID)	**0.0027**		0.00088		% v/v			08/23/12 11:21	2.2

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.1**		2.0		ppb v/v			08/26/12 13:35	2.53
Benzene	**3.6**		0.76		ppb v/v			08/26/12 13:35	2.53
Benzyl chloride	ND		2.0		ppb v/v			08/26/12 13:35	2.53
Bromodichloromethane	ND		0.76		ppb v/v			08/26/12 13:35	2.53
Bromoform	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Bromomethane	ND		2.0		ppb v/v			08/26/12 13:35	2.53
2-Butanone (MEK)	ND		2.0		ppb v/v			08/26/12 13:35	2.53
Carbon disulfide	**25**		2.0		ppb v/v			08/26/12 13:35	2.53
Carbon tetrachloride	ND		2.0		ppb v/v			08/26/12 13:35	2.53
Chlorobenzene	ND		0.76		ppb v/v			08/26/12 13:35	2.53
Dibromochloromethane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Chloroethane	ND		2.0		ppb v/v			08/26/12 13:35	2.53
Chloroform	**0.90**		0.76		ppb v/v			08/26/12 13:35	2.53
Chloromethane	ND		2.0		ppb v/v			08/26/12 13:35	2.53
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			08/26/12 13:35	2.53
1,2-Dichlorobenzene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,3-Dichlorobenzene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,4-Dichlorobenzene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Dichlorodifluoromethane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,1-Dichloroethane	ND		0.76		ppb v/v			08/26/12 13:35	2.53
1,2-Dichloroethane	ND		2.0		ppb v/v			08/26/12 13:35	2.53
1,1-Dichloroethene	ND		2.0		ppb v/v			08/26/12 13:35	2.53
cis-1,2-Dichloroethene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
trans-1,2-Dichloroethene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,2-Dichloropropane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
cis-1,3-Dichloropropene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
trans-1,3-Dichloropropene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Ethylbenzene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
4-Ethyltoluene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Hexachlorobutadiene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
2-Hexanone	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Methylene chloride	ND		1.0		ppb v/v			08/26/12 13:35	2.53
4-Methyl-2-pentanone (MIBK)	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Styrene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,1,2,2-Tetrachloroethane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Tetrachloroethene	**1.0**		1.0		ppb v/v			08/26/12 13:35	2.53
Toluene	**1.2**		1.0		ppb v/v			08/26/12 13:35	2.53
1,2,4-Trichlorobenzene	ND		6.3		ppb v/v			08/26/12 13:35	2.53
1,1,1-Trichloroethane	ND		0.76		ppb v/v			08/26/12 13:35	2.53
1,1,2-Trichloroethane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Trichloroethene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Trichlorofluoromethane	**4.8**		1.0		ppb v/v			08/26/12 13:35	2.53
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ppb v/v			08/26/12 13:35	2.53
1,2,4-Trimethylbenzene	ND		6.3		ppb v/v			08/26/12 13:35	2.53

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-6
Date Collected: 08/20/12 10:30
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ppb v/v			08/26/12 13:35	2.53
Vinyl acetate	ND		2.0		ppb v/v			08/26/12 13:35	2.53
Vinyl chloride	ND		0.51		ppb v/v			08/26/12 13:35	2.53
m,p-Xylene	**2.3**		2.0		ppb v/v			08/26/12 13:35	2.53
o-Xylene	**1.4**		1.0		ppb v/v			08/26/12 13:35	2.53
Naphthalene	ND		5.1		ppb v/v			08/26/12 13:35	2.53

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**17**		4.8		ug/m3			08/26/12 13:35	2.53
Benzene	**11**		2.4		ug/m3			08/26/12 13:35	2.53
Benzyl chloride	ND		10		ug/m3			08/26/12 13:35	2.53
Bromodichloromethane	ND		5.1		ug/m3			08/26/12 13:35	2.53
Bromoform	ND		10		ug/m3			08/26/12 13:35	2.53
Bromomethane	ND		7.9		ug/m3			08/26/12 13:35	2.53
2-Butanone (MEK)	ND		6.0		ug/m3			08/26/12 13:35	2.53
Carbon disulfide	**76**		6.3		ug/m3			08/26/12 13:35	2.53
Carbon tetrachloride	ND		13		ug/m3			08/26/12 13:35	2.53
Chlorobenzene	ND		3.5		ug/m3			08/26/12 13:35	2.53
Dibromochloromethane	ND		8.6		ug/m3			08/26/12 13:35	2.53
Chloroethane	ND		5.3		ug/m3			08/26/12 13:35	2.53
Chloroform	**4.4**		3.7		ug/m3			08/26/12 13:35	2.53
Chloromethane	ND		4.2		ug/m3			08/26/12 13:35	2.53
1,2-Dibromoethane (EDB)	ND		16		ug/m3			08/26/12 13:35	2.53
1,2-Dichlorobenzene	ND		6.1		ug/m3			08/26/12 13:35	2.53
1,3-Dichlorobenzene	ND		6.1		ug/m3			08/26/12 13:35	2.53
1,4-Dichlorobenzene	ND		6.1		ug/m3			08/26/12 13:35	2.53
Dichlorodifluoromethane	ND		5.0		ug/m3			08/26/12 13:35	2.53
1,1-Dichloroethane	ND		3.1		ug/m3			08/26/12 13:35	2.53
1,2-Dichloroethane	ND		8.2		ug/m3			08/26/12 13:35	2.53
1,1-Dichloroethene	ND		8.0		ug/m3			08/26/12 13:35	2.53
cis-1,2-Dichloroethene	ND		4.0		ug/m3			08/26/12 13:35	2.53
trans-1,2-Dichloroethene	ND		4.0		ug/m3			08/26/12 13:35	2.53
1,2-Dichloropropane	ND		4.7		ug/m3			08/26/12 13:35	2.53
cis-1,3-Dichloropropene	ND		4.6		ug/m3			08/26/12 13:35	2.53
trans-1,3-Dichloropropene	ND		4.6		ug/m3			08/26/12 13:35	2.53
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		7.1		ug/m3			08/26/12 13:35	2.53
Ethylbenzene	ND		4.4		ug/m3			08/26/12 13:35	2.53
4-Ethyltoluene	ND		5.0		ug/m3			08/26/12 13:35	2.53
Hexachlorobutadiene	ND		11		ug/m3			08/26/12 13:35	2.53
2-Hexanone	ND		4.1		ug/m3			08/26/12 13:35	2.53
Methylene chloride	ND		3.5		ug/m3			08/26/12 13:35	2.53
4-Methyl-2-pentanone (MIBK)	ND		4.1		ug/m3			08/26/12 13:35	2.53
Styrene	ND		4.3		ug/m3			08/26/12 13:35	2.53
1,1,2,2-Tetrachloroethane	ND		6.9		ug/m3			08/26/12 13:35	2.53
Tetrachloroethene	**7.0**		6.9		ug/m3			08/26/12 13:35	2.53
Toluene	**4.6**		3.8		ug/m3			08/26/12 13:35	2.53
1,2,4-Trichlorobenzene	ND		47		ug/m3			08/26/12 13:35	2.53
1,1,1-Trichloroethane	ND		4.1		ug/m3			08/26/12 13:35	2.53
1,1,2-Trichloroethane	ND		5.5		ug/m3			08/26/12 13:35	2.53
Trichloroethene	ND		5.4		ug/m3			08/26/12 13:35	2.53
Trichlorofluoromethane	**27**		5.7		ug/m3			08/26/12 13:35	2.53

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-6
Date Collected: 08/20/12 10:30
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8		ug/m3			08/26/12 13:35	2.53
1,2,4-Trimethylbenzene	ND		31		ug/m3			08/26/12 13:35	2.53
1,3,5-Trimethylbenzene	ND		5.0		ug/m3			08/26/12 13:35	2.53
Vinyl acetate	ND		7.1		ug/m3			08/26/12 13:35	2.53
Vinyl chloride	ND		1.3		ug/m3			08/26/12 13:35	2.53
m,p-Xylene	**9.9**		8.8		ug/m3			08/26/12 13:35	2.53
o-Xylene	**6.0**		4.4		ug/m3			08/26/12 13:35	2.53
Naphthalene	ND		27		ug/m3			08/26/12 13:35	2.53

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/26/12 13:35*	*2.53*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/12 13:35*	*2.53*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/26/12 13:35*	*2.53*

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-5
Date Collected: 08/20/12 11:27
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-3
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.039		% v/v			08/23/12 11:41	1.96

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**18**		1.4		ppb v/v			08/26/12 20:29	1.72
Benzene	**1.2**		0.52		ppb v/v			08/26/12 20:29	1.72
Benzyl chloride	ND		1.4		ppb v/v			08/26/12 20:29	1.72
Bromodichloromethane	ND		0.52		ppb v/v			08/26/12 20:29	1.72
Bromoform	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Bromomethane	ND		1.4		ppb v/v			08/26/12 20:29	1.72
2-Butanone (MEK)	**2.6**		1.4		ppb v/v			08/26/12 20:29	1.72
Carbon disulfide	ND		1.4		ppb v/v			08/26/12 20:29	1.72
Carbon tetrachloride	ND		1.4		ppb v/v			08/26/12 20:29	1.72
Chlorobenzene	ND		0.52		ppb v/v			08/26/12 20:29	1.72
Dibromochloromethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Chloroethane	ND		1.4		ppb v/v			08/26/12 20:29	1.72
Chloroform	ND		0.52		ppb v/v			08/26/12 20:29	1.72
Chloromethane	ND		1.4		ppb v/v			08/26/12 20:29	1.72
1,2-Dibromoethane (EDB)	ND		1.4		ppb v/v			08/26/12 20:29	1.72
1,2-Dichlorobenzene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,3-Dichlorobenzene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,4-Dichlorobenzene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Dichlorodifluoromethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,1-Dichloroethane	ND		0.52		ppb v/v			08/26/12 20:29	1.72
1,2-Dichloroethane	ND		1.4		ppb v/v			08/26/12 20:29	1.72
1,1-Dichloroethene	ND		1.4		ppb v/v			08/26/12 20:29	1.72
cis-1,2-Dichloroethene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
trans-1,2-Dichloroethene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,2-Dichloropropane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
cis-1,3-Dichloropropene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
trans-1,3-Dichloropropene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Ethylbenzene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
4-Ethyltoluene	**0.71**		0.69		ppb v/v			08/26/12 20:29	1.72
Hexachlorobutadiene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
2-Hexanone	**0.78**		0.69		ppb v/v			08/26/12 20:29	1.72
Methylene chloride	ND		0.69		ppb v/v			08/26/12 20:29	1.72
4-Methyl-2-pentanone (MIBK)	**0.88**		0.69		ppb v/v			08/26/12 20:29	1.72
Styrene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,1,2,2-Tetrachloroethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Tetrachloroethene	**5.5**		0.69		ppb v/v			08/26/12 20:29	1.72
Toluene	**0.76**		0.69		ppb v/v			08/26/12 20:29	1.72
1,2,4-Trichlorobenzene	ND		4.3		ppb v/v			08/26/12 20:29	1.72
1,1,1-Trichloroethane	ND		0.52		ppb v/v			08/26/12 20:29	1.72
1,1,2-Trichloroethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Trichloroethene	ND		0.69		ppb v/v			08/26/12 20:29	1.72
Trichlorofluoromethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.69		ppb v/v			08/26/12 20:29	1.72
1,2,4-Trimethylbenzene	ND		4.3		ppb v/v			08/26/12 20:29	1.72
1,3,5-Trimethylbenzene	ND		0.69		ppb v/v			08/26/12 20:29	1.72

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-5
Date Collected: 08/20/12 11:27
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-3
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		1.4		ppb v/v			08/26/12 20:29	1.72
Vinyl chloride	ND		0.34		ppb v/v			08/26/12 20:29	1.72
m,p-Xylene	**1.6**		1.4		ppb v/v			08/26/12 20:29	1.72
o-Xylene	**0.80**		0.69		ppb v/v			08/26/12 20:29	1.72

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**43**		3.3		ug/m3			08/26/12 20:29	1.72
Benzene	**3.9**		1.6		ug/m3			08/26/12 20:29	1.72
Benzyl chloride	ND		7.1		ug/m3			08/26/12 20:29	1.72
Bromodichloromethane	ND		3.5		ug/m3			08/26/12 20:29	1.72
Bromoform	ND		7.1		ug/m3			08/26/12 20:29	1.72
Bromomethane	ND		5.3		ug/m3			08/26/12 20:29	1.72
2-Butanone (MEK)	**7.5**		4.1		ug/m3			08/26/12 20:29	1.72
Carbon disulfide	ND		4.3		ug/m3			08/26/12 20:29	1.72
Carbon tetrachloride	ND		8.7		ug/m3			08/26/12 20:29	1.72
Chlorobenzene	ND		2.4		ug/m3			08/26/12 20:29	1.72
Dibromochloromethane	ND		5.9		ug/m3			08/26/12 20:29	1.72
Chloroethane	ND		3.6		ug/m3			08/26/12 20:29	1.72
Chloroform	ND		2.5		ug/m3			08/26/12 20:29	1.72
Chloromethane	ND		2.8		ug/m3			08/26/12 20:29	1.72
1,2-Dibromoethane (EDB)	ND		11		ug/m3			08/26/12 20:29	1.72
1,2-Dichlorobenzene	ND		4.1		ug/m3			08/26/12 20:29	1.72
1,3-Dichlorobenzene	ND		4.1		ug/m3			08/26/12 20:29	1.72
1,4-Dichlorobenzene	ND		4.1		ug/m3			08/26/12 20:29	1.72
Dichlorodifluoromethane	ND		3.4		ug/m3			08/26/12 20:29	1.72
1,1-Dichloroethane	ND		2.1		ug/m3			08/26/12 20:29	1.72
1,2-Dichloroethane	ND		5.6		ug/m3			08/26/12 20:29	1.72
1,1-Dichloroethene	ND		5.5		ug/m3			08/26/12 20:29	1.72
cis-1,2-Dichloroethene	ND		2.7		ug/m3			08/26/12 20:29	1.72
trans-1,2-Dichloroethene	ND		2.7		ug/m3			08/26/12 20:29	1.72
1,2-Dichloropropane	ND		3.2		ug/m3			08/26/12 20:29	1.72
cis-1,3-Dichloropropene	ND		3.1		ug/m3			08/26/12 20:29	1.72
trans-1,3-Dichloropropene	ND		3.1		ug/m3			08/26/12 20:29	1.72
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		4.8		ug/m3			08/26/12 20:29	1.72
Ethylbenzene	ND		3.0		ug/m3			08/26/12 20:29	1.72
4-Ethyltoluene	**3.5**		3.4		ug/m3			08/26/12 20:29	1.72
Hexachlorobutadiene	ND		7.3		ug/m3			08/26/12 20:29	1.72
2-Hexanone	**3.2**		2.8		ug/m3			08/26/12 20:29	1.72
Methylene chloride	ND		2.4		ug/m3			08/26/12 20:29	1.72
4-Methyl-2-pentanone (MIBK)	**3.6**		2.8		ug/m3			08/26/12 20:29	1.72
Styrene	ND		2.9		ug/m3			08/26/12 20:29	1.72
1,1,2,2-Tetrachloroethane	ND		4.7		ug/m3			08/26/12 20:29	1.72
Tetrachloroethene	**37**		4.7		ug/m3			08/26/12 20:29	1.72
Toluene	**2.9**		2.6		ug/m3			08/26/12 20:29	1.72
1,2,4-Trichlorobenzene	ND		32		ug/m3			08/26/12 20:29	1.72
1,1,1-Trichloroethane	ND		2.8		ug/m3			08/26/12 20:29	1.72
1,1,2-Trichloroethane	ND		3.8		ug/m3			08/26/12 20:29	1.72
Trichloroethene	ND		3.7		ug/m3			08/26/12 20:29	1.72
Trichlorofluoromethane	ND		3.9		ug/m3			08/26/12 20:29	1.72
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3		ug/m3			08/26/12 20:29	1.72
1,2,4-Trimethylbenzene	ND		21		ug/m3			08/26/12 20:29	1.72

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-5
Date Collected: 08/20/12 11:27
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-3
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		3.4		ug/m3			08/26/12 20:29	1.72
Vinyl acetate	ND		4.8		ug/m3			08/26/12 20:29	1.72
Vinyl chloride	ND		0.88		ug/m3			08/26/12 20:29	1.72
m,p-Xylene	**7.0**		6.0		ug/m3			08/26/12 20:29	1.72
o-Xylene	**3.5**		3.0		ug/m3			08/26/12 20:29	1.72

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/26/12 20:29*	*1.72*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/12 20:29*	*1.72*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/26/12 20:29*	*1.72*

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-1
Lab Sample ID: 340-3569-4
Date Collected: 08/20/12 12:22
Matrix: Air
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.047		% v/v			08/23/12 12:01	2.35

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13**		0.80		ppb v/v			08/25/12 18:36	1
Benzene	**2.0**		0.30		ppb v/v			08/25/12 18:36	1
Benzyl chloride	ND		0.80		ppb v/v			08/25/12 18:36	1
Bromodichloromethane	ND		0.30		ppb v/v			08/25/12 18:36	1
Bromoform	ND		0.40		ppb v/v			08/25/12 18:36	1
Bromomethane	ND		0.80		ppb v/v			08/25/12 18:36	1
2-Butanone (MEK)	**1.5**		0.80		ppb v/v			08/25/12 18:36	1
Carbon disulfide	**2.4**		0.80		ppb v/v			08/25/12 18:36	1
Carbon tetrachloride	ND		0.80		ppb v/v			08/25/12 18:36	1
Chlorobenzene	ND		0.30		ppb v/v			08/25/12 18:36	1
Dibromochloromethane	ND		0.40		ppb v/v			08/25/12 18:36	1
Chloroethane	ND		0.80		ppb v/v			08/25/12 18:36	1
Chloroform	ND		0.30		ppb v/v			08/25/12 18:36	1
Chloromethane	ND		0.80		ppb v/v			08/25/12 18:36	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			08/25/12 18:36	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 18:36	1
1,3-Dichlorobenzene	**0.93**		0.40		ppb v/v			08/25/12 18:36	1
1,4-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 18:36	1
Dichlorodifluoromethane	**0.45**		0.40		ppb v/v			08/25/12 18:36	1
1,1-Dichloroethane	ND		0.30		ppb v/v			08/25/12 18:36	1
1,2-Dichloroethane	ND		0.80		ppb v/v			08/25/12 18:36	1
1,1-Dichloroethene	ND		0.80		ppb v/v			08/25/12 18:36	1
cis-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 18:36	1
trans-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 18:36	1
1,2-Dichloropropane	ND		0.40		ppb v/v			08/25/12 18:36	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 18:36	1
trans-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 18:36	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40		ppb v/v			08/25/12 18:36	1
Ethylbenzene	ND		0.40		ppb v/v			08/25/12 18:36	1
4-Ethyltoluene	ND		0.40		ppb v/v			08/25/12 18:36	1
Hexachlorobutadiene	ND		0.40		ppb v/v			08/25/12 18:36	1
2-Hexanone	**0.42**		0.40		ppb v/v			08/25/12 18:36	1
Methylene chloride	ND		0.40		ppb v/v			08/25/12 18:36	1
4-Methyl-2-pentanone (MIBK)	ND		0.40		ppb v/v			08/25/12 18:36	1
Styrene	ND		0.40		ppb v/v			08/25/12 18:36	1
1,1,2,2-Tetrachloroethane	ND		0.40		ppb v/v			08/25/12 18:36	1
Tetrachloroethene	**29**		0.40		ppb v/v			08/25/12 18:36	1
Toluene	**0.94**		0.40		ppb v/v			08/25/12 18:36	1
1,2,4-Trichlorobenzene	ND		2.5		ppb v/v			08/25/12 18:36	1
1,1,1-Trichloroethane	ND		0.30		ppb v/v			08/25/12 18:36	1
1,1,2-Trichloroethane	ND		0.40		ppb v/v			08/25/12 18:36	1
Trichloroethene	ND		0.40		ppb v/v			08/25/12 18:36	1
Trichlorofluoromethane	ND		0.40		ppb v/v			08/25/12 18:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40		ppb v/v			08/25/12 18:36	1
1,2,4-Trimethylbenzene	ND		2.5		ppb v/v			08/25/12 18:36	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			08/25/12 18:36	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-1
Date Collected: 08/20/12 12:22
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		0.80		ppb v/v			08/25/12 18:36	1
Vinyl chloride	ND		0.20		ppb v/v			08/25/12 18:36	1
m,p-Xylene	**0.86**		0.80		ppb v/v			08/25/12 18:36	1
o-Xylene	**0.41**		0.40		ppb v/v			08/25/12 18:36	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**30**		1.9		ug/m3			08/25/12 18:36	1
Benzene	**6.2**		0.96		ug/m3			08/25/12 18:36	1
Benzyl chloride	ND		4.1		ug/m3			08/25/12 18:36	1
Bromodichloromethane	ND		2.0		ug/m3			08/25/12 18:36	1
Bromoform	ND		4.1		ug/m3			08/25/12 18:36	1
Bromomethane	ND		3.1		ug/m3			08/25/12 18:36	1
2-Butanone (MEK)	**4.3**		2.4		ug/m3			08/25/12 18:36	1
Carbon disulfide	**7.6**		2.5		ug/m3			08/25/12 18:36	1
Carbon tetrachloride	ND		5.0		ug/m3			08/25/12 18:36	1
Chlorobenzene	ND		1.4		ug/m3			08/25/12 18:36	1
Dibromochloromethane	ND		3.4		ug/m3			08/25/12 18:36	1
Chloroethane	ND		2.1		ug/m3			08/25/12 18:36	1
Chloroform	ND		1.5		ug/m3			08/25/12 18:36	1
Chloromethane	ND		1.7		ug/m3			08/25/12 18:36	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			08/25/12 18:36	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 18:36	1
1,3-Dichlorobenzene	**5.6**		2.4		ug/m3			08/25/12 18:36	1
1,4-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 18:36	1
Dichlorodifluoromethane	**2.2**		2.0		ug/m3			08/25/12 18:36	1
1,1-Dichloroethane	ND		1.2		ug/m3			08/25/12 18:36	1
1,2-Dichloroethane	ND		3.2		ug/m3			08/25/12 18:36	1
1,1-Dichloroethene	ND		3.2		ug/m3			08/25/12 18:36	1
cis-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 18:36	1
trans-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 18:36	1
1,2-Dichloropropane	ND		1.8		ug/m3			08/25/12 18:36	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 18:36	1
trans-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 18:36	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8		ug/m3			08/25/12 18:36	1
Ethylbenzene	ND		1.7		ug/m3			08/25/12 18:36	1
4-Ethyltoluene	ND		2.0		ug/m3			08/25/12 18:36	1
Hexachlorobutadiene	ND		4.3		ug/m3			08/25/12 18:36	1
2-Hexanone	**1.7**		1.6		ug/m3			08/25/12 18:36	1
Methylene chloride	ND		1.4		ug/m3			08/25/12 18:36	1
4-Methyl-2-pentanone (MIBK)	ND		1.6		ug/m3			08/25/12 18:36	1
Styrene	ND		1.7		ug/m3			08/25/12 18:36	1
1,1,2,2-Tetrachloroethane	ND		2.7		ug/m3			08/25/12 18:36	1
Tetrachloroethene	**200**		2.7		ug/m3			08/25/12 18:36	1
Toluene	**3.5**		1.5		ug/m3			08/25/12 18:36	1
1,2,4-Trichlorobenzene	ND		19		ug/m3			08/25/12 18:36	1
1,1,1-Trichloroethane	ND		1.6		ug/m3			08/25/12 18:36	1
1,1,2-Trichloroethane	ND		2.2		ug/m3			08/25/12 18:36	1
Trichloroethene	ND		2.1		ug/m3			08/25/12 18:36	1
Trichlorofluoromethane	ND		2.2		ug/m3			08/25/12 18:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1		ug/m3			08/25/12 18:36	1
1,2,4-Trimethylbenzene	ND		12		ug/m3			08/25/12 18:36	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-1
Lab Sample ID: 340-3569-4
Date Collected: 08/20/12 12:22
Matrix: Air
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			08/25/12 18:36	1
Vinyl acetate	ND		2.8		ug/m3			08/25/12 18:36	1
Vinyl chloride	ND		0.51		ug/m3			08/25/12 18:36	1
m,p-Xylene	**3.8**		3.5		ug/m3			08/25/12 18:36	1
o-Xylene	**1.8**		1.7		ug/m3			08/25/12 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/25/12 18:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/25/12 18:36*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/25/12 18:36*	*1*

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-2
Date Collected: 08/20/12 12:55
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-5
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.046		% v/v			08/23/12 12:31	2.29

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.3		ppb v/v			08/27/12 00:11	2.9
Benzene	**2.3**		0.87		ppb v/v			08/27/12 00:11	2.9
Benzyl chloride	ND		2.3		ppb v/v			08/27/12 00:11	2.9
Bromodichloromethane	ND		0.87		ppb v/v			08/27/12 00:11	2.9
Bromoform	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Bromomethane	ND		2.3		ppb v/v			08/27/12 00:11	2.9
2-Butanone (MEK)	ND		2.3		ppb v/v			08/27/12 00:11	2.9
Carbon disulfide	**2.6**		2.3		ppb v/v			08/27/12 00:11	2.9
Carbon tetrachloride	ND		2.3		ppb v/v			08/27/12 00:11	2.9
Chlorobenzene	ND		0.87		ppb v/v			08/27/12 00:11	2.9
Dibromochloromethane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Chloroethane	ND		2.3		ppb v/v			08/27/12 00:11	2.9
Chloroform	ND		0.87		ppb v/v			08/27/12 00:11	2.9
Chloromethane	ND		2.3		ppb v/v			08/27/12 00:11	2.9
1,2-Dibromoethane (EDB)	ND		2.3		ppb v/v			08/27/12 00:11	2.9
1,2-Dichlorobenzene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,3-Dichlorobenzene	**1.2**		1.2		ppb v/v			08/27/12 00:11	2.9
1,4-Dichlorobenzene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Dichlorodifluoromethane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,1-Dichloroethane	ND		0.87		ppb v/v			08/27/12 00:11	2.9
1,2-Dichloroethane	ND		2.3		ppb v/v			08/27/12 00:11	2.9
1,1-Dichloroethene	ND		2.3		ppb v/v			08/27/12 00:11	2.9
cis-1,2-Dichloroethene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
trans-1,2-Dichloroethene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,2-Dichloropropane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
cis-1,3-Dichloropropene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
trans-1,3-Dichloropropene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Ethylbenzene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
4-Ethyltoluene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Hexachlorobutadiene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
2-Hexanone	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Methylene chloride	ND		1.2		ppb v/v			08/27/12 00:11	2.9
4-Methyl-2-pentanone (MIBK)	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Styrene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,1,2,2-Tetrachloroethane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Tetrachloroethene	**3.3**		1.2		ppb v/v			08/27/12 00:11	2.9
Toluene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,2,4-Trichlorobenzene	ND		7.3		ppb v/v			08/27/12 00:11	2.9
1,1,1-Trichloroethane	ND		0.87		ppb v/v			08/27/12 00:11	2.9
1,1,2-Trichloroethane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Trichloroethene	ND		1.2		ppb v/v			08/27/12 00:11	2.9
Trichlorofluoromethane	**1.4**		1.2		ppb v/v			08/27/12 00:11	2.9
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.2		ppb v/v			08/27/12 00:11	2.9
1,2,4-Trimethylbenzene	ND		7.3		ppb v/v			08/27/12 00:11	2.9
1,3,5-Trimethylbenzene	ND		1.2		ppb v/v			08/27/12 00:11	2.9

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-2
Date Collected: 08/20/12 12:55
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-5
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		2.3		ppb v/v			08/27/12 00:11	2.9
Vinyl chloride	ND		0.58		ppb v/v			08/27/12 00:11	2.9
m,p-Xylene	ND		2.3		ppb v/v			08/27/12 00:11	2.9
o-Xylene	ND		1.2		ppb v/v			08/27/12 00:11	2.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.5		ug/m3			08/27/12 00:11	2.9
Benzene	**7.4**		2.8		ug/m3			08/27/12 00:11	2.9
Benzyl chloride	ND		12		ug/m3			08/27/12 00:11	2.9
Bromodichloromethane	ND		5.8		ug/m3			08/27/12 00:11	2.9
Bromoform	ND		12		ug/m3			08/27/12 00:11	2.9
Bromomethane	ND		9.0		ug/m3			08/27/12 00:11	2.9
2-Butanone (MEK)	ND		6.8		ug/m3			08/27/12 00:11	2.9
Carbon disulfide	**8.2**		7.2		ug/m3			08/27/12 00:11	2.9
Carbon tetrachloride	ND		15		ug/m3			08/27/12 00:11	2.9
Chlorobenzene	ND		4.0		ug/m3			08/27/12 00:11	2.9
Dibromochloromethane	ND		9.9		ug/m3			08/27/12 00:11	2.9
Chloroethane	ND		6.1		ug/m3			08/27/12 00:11	2.9
Chloroform	ND		4.2		ug/m3			08/27/12 00:11	2.9
Chloromethane	ND		4.8		ug/m3			08/27/12 00:11	2.9
1,2-Dibromoethane (EDB)	ND		18		ug/m3			08/27/12 00:11	2.9
1,2-Dichlorobenzene	ND		7.0		ug/m3			08/27/12 00:11	2.9
1,3-Dichlorobenzene	**7.1**		7.0		ug/m3			08/27/12 00:11	2.9
1,4-Dichlorobenzene	ND		7.0		ug/m3			08/27/12 00:11	2.9
Dichlorodifluoromethane	ND		5.7		ug/m3			08/27/12 00:11	2.9
1,1-Dichloroethane	ND		3.5		ug/m3			08/27/12 00:11	2.9
1,2-Dichloroethane	ND		9.4		ug/m3			08/27/12 00:11	2.9
1,1-Dichloroethene	ND		9.2		ug/m3			08/27/12 00:11	2.9
cis-1,2-Dichloroethene	ND		4.6		ug/m3			08/27/12 00:11	2.9
trans-1,2-Dichloroethene	ND		4.6		ug/m3			08/27/12 00:11	2.9
1,2-Dichloropropane	ND		5.4		ug/m3			08/27/12 00:11	2.9
cis-1,3-Dichloropropene	ND		5.3		ug/m3			08/27/12 00:11	2.9
trans-1,3-Dichloropropene	ND		5.3		ug/m3			08/27/12 00:11	2.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		8.1		ug/m3			08/27/12 00:11	2.9
Ethylbenzene	ND		5.0		ug/m3			08/27/12 00:11	2.9
4-Ethyltoluene	ND		5.7		ug/m3			08/27/12 00:11	2.9
Hexachlorobutadiene	ND		12		ug/m3			08/27/12 00:11	2.9
2-Hexanone	ND		4.8		ug/m3			08/27/12 00:11	2.9
Methylene chloride	ND		4.0		ug/m3			08/27/12 00:11	2.9
4-Methyl-2-pentanone (MIBK)	ND		4.8		ug/m3			08/27/12 00:11	2.9
Styrene	ND		4.9		ug/m3			08/27/12 00:11	2.9
1,1,2,2-Tetrachloroethane	ND		8.0		ug/m3			08/27/12 00:11	2.9
Tetrachloroethene	**23**		7.9		ug/m3			08/27/12 00:11	2.9
Toluene	ND		4.4		ug/m3			08/27/12 00:11	2.9
1,2,4-Trichlorobenzene	ND		54		ug/m3			08/27/12 00:11	2.9
1,1,1-Trichloroethane	ND		4.7		ug/m3			08/27/12 00:11	2.9
1,1,2-Trichloroethane	ND		6.3		ug/m3			08/27/12 00:11	2.9
Trichloroethene	ND		6.2		ug/m3			08/27/12 00:11	2.9
Trichlorofluoromethane	**7.7**		6.5		ug/m3			08/27/12 00:11	2.9
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9		ug/m3			08/27/12 00:11	2.9
1,2,4-Trimethylbenzene	ND		36		ug/m3			08/27/12 00:11	2.9

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-2
Date Collected: 08/20/12 12:55
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-5
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		5.7		ug/m3			08/27/12 00:11	2.9
Vinyl acetate	ND		8.2		ug/m3			08/27/12 00:11	2.9
Vinyl chloride	ND		1.5		ug/m3			08/27/12 00:11	2.9
m,p-Xylene	ND		10		ug/m3			08/27/12 00:11	2.9
o-Xylene	ND		5.0		ug/m3			08/27/12 00:11	2.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/27/12 00:11*	*2.9*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/27/12 00:11*	*2.9*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/27/12 00:11*	*2.9*

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-3
Date Collected: 08/20/12 13:16
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-6
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.046		% v/v			08/23/12 12:57	2.3

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.7**		1.8		ppb v/v			08/27/12 13:05	2.22
Benzene	**2.4**		0.67		ppb v/v			08/27/12 13:05	2.22
Benzyl chloride	ND		1.8		ppb v/v			08/27/12 13:05	2.22
Bromodichloromethane	ND		0.67		ppb v/v			08/27/12 13:05	2.22
Bromoform	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Bromomethane	ND		1.8		ppb v/v			08/27/12 13:05	2.22
2-Butanone (MEK)	ND		1.8		ppb v/v			08/27/12 13:05	2.22
Carbon disulfide	**7.2**		1.8		ppb v/v			08/27/12 13:05	2.22
Carbon tetrachloride	ND		1.8		ppb v/v			08/27/12 13:05	2.22
Chlorobenzene	ND		0.67		ppb v/v			08/27/12 13:05	2.22
Dibromochloromethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Chloroethane	ND		1.8		ppb v/v			08/27/12 13:05	2.22
Chloroform	**3.4**		0.67		ppb v/v			08/27/12 13:05	2.22
Chloromethane	ND		1.8		ppb v/v			08/27/12 13:05	2.22
1,2-Dibromoethane (EDB)	ND		1.8		ppb v/v			08/27/12 13:05	2.22
1,2-Dichlorobenzene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,3-Dichlorobenzene	**1.0**		0.89		ppb v/v			08/27/12 13:05	2.22
1,4-Dichlorobenzene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Dichlorodifluoromethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,1-Dichloroethane	ND		0.67		ppb v/v			08/27/12 13:05	2.22
1,2-Dichloroethane	ND		1.8		ppb v/v			08/27/12 13:05	2.22
1,1-Dichloroethene	ND		1.8		ppb v/v			08/27/12 13:05	2.22
cis-1,2-Dichloroethene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
trans-1,2-Dichloroethene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,2-Dichloropropane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
cis-1,3-Dichloropropene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
trans-1,3-Dichloropropene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Ethylbenzene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
4-Ethyltoluene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Hexachlorobutadiene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
2-Hexanone	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Methylene chloride	ND		0.89		ppb v/v			08/27/12 13:05	2.22
4-Methyl-2-pentanone (MIBK)	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Styrene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,1,2,2-Tetrachloroethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Tetrachloroethene	**2.0**		0.89		ppb v/v			08/27/12 13:05	2.22
Toluene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,2,4-Trichlorobenzene	ND		5.6		ppb v/v			08/27/12 13:05	2.22
1,1,1-Trichloroethane	ND		0.67		ppb v/v			08/27/12 13:05	2.22
1,1,2-Trichloroethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Trichloroethene	ND		0.89		ppb v/v			08/27/12 13:05	2.22
Trichlorofluoromethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.89		ppb v/v			08/27/12 13:05	2.22
1,2,4-Trimethylbenzene	ND		5.6		ppb v/v			08/27/12 13:05	2.22
1,3,5-Trimethylbenzene	ND		0.89		ppb v/v			08/27/12 13:05	2.22

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-3
Date Collected: 08/20/12 13:16
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-6
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		1.8		ppb v/v			08/27/12 13:05	2.22
Vinyl chloride	ND		0.44		ppb v/v			08/27/12 13:05	2.22
m,p-Xylene	ND		1.8		ppb v/v			08/27/12 13:05	2.22
o-Xylene	ND		0.89		ppb v/v			08/27/12 13:05	2.22

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**23**		4.2		ug/m3			08/27/12 13:05	2.22
Benzene	**7.5**		2.1		ug/m3			08/27/12 13:05	2.22
Benzyl chloride	ND		9.2		ug/m3			08/27/12 13:05	2.22
Bromodichloromethane	ND		4.5		ug/m3			08/27/12 13:05	2.22
Bromoform	ND		9.2		ug/m3			08/27/12 13:05	2.22
Bromomethane	ND		6.9		ug/m3			08/27/12 13:05	2.22
2-Butanone (MEK)	ND		5.2		ug/m3			08/27/12 13:05	2.22
Carbon disulfide	**23**		5.5		ug/m3			08/27/12 13:05	2.22
Carbon tetrachloride	ND		11		ug/m3			08/27/12 13:05	2.22
Chlorobenzene	ND		3.1		ug/m3			08/27/12 13:05	2.22
Dibromochloromethane	ND		7.6		ug/m3			08/27/12 13:05	2.22
Chloroethane	ND		4.7		ug/m3			08/27/12 13:05	2.22
Chloroform	**17**		3.3		ug/m3			08/27/12 13:05	2.22
Chloromethane	ND		3.7		ug/m3			08/27/12 13:05	2.22
1,2-Dibromoethane (EDB)	ND		14		ug/m3			08/27/12 13:05	2.22
1,2-Dichlorobenzene	ND		5.3		ug/m3			08/27/12 13:05	2.22
1,3-Dichlorobenzene	**6.2**		5.3		ug/m3			08/27/12 13:05	2.22
1,4-Dichlorobenzene	ND		5.3		ug/m3			08/27/12 13:05	2.22
Dichlorodifluoromethane	ND		4.4		ug/m3			08/27/12 13:05	2.22
1,1-Dichloroethane	ND		2.7		ug/m3			08/27/12 13:05	2.22
1,2-Dichloroethane	ND		7.2		ug/m3			08/27/12 13:05	2.22
1,1-Dichloroethene	ND		7.0		ug/m3			08/27/12 13:05	2.22
cis-1,2-Dichloroethene	ND		3.5		ug/m3			08/27/12 13:05	2.22
trans-1,2-Dichloroethene	ND		3.5		ug/m3			08/27/12 13:05	2.22
1,2-Dichloropropane	ND		4.1		ug/m3			08/27/12 13:05	2.22
cis-1,3-Dichloropropene	ND		4.0		ug/m3			08/27/12 13:05	2.22
trans-1,3-Dichloropropene	ND		4.0		ug/m3			08/27/12 13:05	2.22
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		6.2		ug/m3			08/27/12 13:05	2.22
Ethylbenzene	ND		3.9		ug/m3			08/27/12 13:05	2.22
4-Ethyltoluene	ND		4.4		ug/m3			08/27/12 13:05	2.22
Hexachlorobutadiene	ND		9.5		ug/m3			08/27/12 13:05	2.22
2-Hexanone	ND		3.6		ug/m3			08/27/12 13:05	2.22
Methylene chloride	ND		3.1		ug/m3			08/27/12 13:05	2.22
4-Methyl-2-pentanone (MIBK)	ND		3.6		ug/m3			08/27/12 13:05	2.22
Styrene	ND		3.8		ug/m3			08/27/12 13:05	2.22
1,1,2,2-Tetrachloroethane	ND		6.1		ug/m3			08/27/12 13:05	2.22
Tetrachloroethene	**14**		6.0		ug/m3			08/27/12 13:05	2.22
Toluene	ND		3.3		ug/m3			08/27/12 13:05	2.22
1,2,4-Trichlorobenzene	ND		41		ug/m3			08/27/12 13:05	2.22
1,1,1-Trichloroethane	ND		3.6		ug/m3			08/27/12 13:05	2.22
1,1,2-Trichloroethane	ND		4.8		ug/m3			08/27/12 13:05	2.22
Trichloroethene	ND		4.8		ug/m3			08/27/12 13:05	2.22
Trichlorofluoromethane	ND		5.0		ug/m3			08/27/12 13:05	2.22
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8		ug/m3			08/27/12 13:05	2.22
1,2,4-Trimethylbenzene	ND		27		ug/m3			08/27/12 13:05	2.22

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-3
Date Collected: 08/20/12 13:16
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-6
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		4.4		ug/m3			08/27/12 13:05	2.22
Vinyl acetate	ND		6.3		ug/m3			08/27/12 13:05	2.22
Vinyl chloride	ND		1.1		ug/m3			08/27/12 13:05	2.22
m,p-Xylene	ND		7.7		ug/m3			08/27/12 13:05	2.22
o-Xylene	ND		3.9		ug/m3			08/27/12 13:05	2.22

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/27/12 13:05*	*2.22*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/27/12 13:05*	*2.22*
Toluene-d8 (Surr)	*114*		*70 - 130*		*08/27/12 13:05*	*2.22*

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-4
Date Collected: 08/20/12 13:43
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-7
Matrix: Air

Method: D1946 - Fixed Gases in Air (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.035		% v/v			08/23/12 14:25	1.74

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**18**		0.80		ppb v/v			08/25/12 20:57	1
Benzene	**0.90**		0.30		ppb v/v			08/25/12 20:57	1
Benzyl chloride	ND		0.80		ppb v/v			08/25/12 20:57	1
Bromodichloromethane	ND		0.30		ppb v/v			08/25/12 20:57	1
Bromoform	ND		0.40		ppb v/v			08/25/12 20:57	1
Bromomethane	ND		0.80		ppb v/v			08/25/12 20:57	1
2-Butanone (MEK)	**1.5**		0.80		ppb v/v			08/25/12 20:57	1
Carbon disulfide	**2.0**		0.80		ppb v/v			08/25/12 20:57	1
Carbon tetrachloride	ND		0.80		ppb v/v			08/25/12 20:57	1
Chlorobenzene	**0.40**		0.30		ppb v/v			08/25/12 20:57	1
Dibromochloromethane	ND		0.40		ppb v/v			08/25/12 20:57	1
Chloroethane	ND		0.80		ppb v/v			08/25/12 20:57	1
Chloroform	**1.6**		0.30		ppb v/v			08/25/12 20:57	1
Chloromethane	ND		0.80		ppb v/v			08/25/12 20:57	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			08/25/12 20:57	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 20:57	1
1,3-Dichlorobenzene	**0.96**		0.40		ppb v/v			08/25/12 20:57	1
1,4-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 20:57	1
Dichlorodifluoromethane	**0.44**		0.40		ppb v/v			08/25/12 20:57	1
1,1-Dichloroethane	ND		0.30		ppb v/v			08/25/12 20:57	1
1,2-Dichloroethane	ND		0.80		ppb v/v			08/25/12 20:57	1
1,1-Dichloroethene	ND		0.80		ppb v/v			08/25/12 20:57	1
cis-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 20:57	1
trans-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 20:57	1
1,2-Dichloropropane	ND		0.40		ppb v/v			08/25/12 20:57	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 20:57	1
trans-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 20:57	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40		ppb v/v			08/25/12 20:57	1
Ethylbenzene	ND		0.40		ppb v/v			08/25/12 20:57	1
4-Ethyltoluene	ND		0.40		ppb v/v			08/25/12 20:57	1
Hexachlorobutadiene	ND		0.40		ppb v/v			08/25/12 20:57	1
2-Hexanone	**0.47**		0.40		ppb v/v			08/25/12 20:57	1
Methylene chloride	**1.6**		0.40		ppb v/v			08/25/12 20:57	1
4-Methyl-2-pentanone (MIBK)	ND		0.40		ppb v/v			08/25/12 20:57	1
Styrene	**0.73**		0.40		ppb v/v			08/25/12 20:57	1
1,1,2,2-Tetrachloroethane	ND		0.40		ppb v/v			08/25/12 20:57	1
Tetrachloroethene	**1.5**		0.40		ppb v/v			08/25/12 20:57	1
Toluene	**4.5**		0.40		ppb v/v			08/25/12 20:57	1
1,2,4-Trichlorobenzene	ND		2.5		ppb v/v			08/25/12 20:57	1
1,1,1-Trichloroethane	ND		0.30		ppb v/v			08/25/12 20:57	1
1,1,2-Trichloroethane	ND		0.40		ppb v/v			08/25/12 20:57	1
Trichloroethene	ND		0.40		ppb v/v			08/25/12 20:57	1
Trichlorofluoromethane	ND		0.40		ppb v/v			08/25/12 20:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40		ppb v/v			08/25/12 20:57	1
1,2,4-Trimethylbenzene	ND		2.5		ppb v/v			08/25/12 20:57	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			08/25/12 20:57	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-4
Date Collected: 08/20/12 13:43
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-7
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		0.80		ppb v/v			08/25/12 20:57	1
Vinyl chloride	ND		0.20		ppb v/v			08/25/12 20:57	1
m,p-Xylene	**0.82**		0.80		ppb v/v			08/25/12 20:57	1
o-Xylene	ND		0.40		ppb v/v			08/25/12 20:57	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**42**		1.9		ug/m3			08/25/12 20:57	1
Benzene	**2.9**		0.96		ug/m3			08/25/12 20:57	1
Benzyl chloride	ND		4.1		ug/m3			08/25/12 20:57	1
Bromodichloromethane	ND		2.0		ug/m3			08/25/12 20:57	1
Bromoform	ND		4.1		ug/m3			08/25/12 20:57	1
Bromomethane	ND		3.1		ug/m3			08/25/12 20:57	1
2-Butanone (MEK)	**4.3**		2.4		ug/m3			08/25/12 20:57	1
Carbon disulfide	**6.4**		2.5		ug/m3			08/25/12 20:57	1
Carbon tetrachloride	ND		5.0		ug/m3			08/25/12 20:57	1
Chlorobenzene	**1.8**		1.4		ug/m3			08/25/12 20:57	1
Dibromochloromethane	ND		3.4		ug/m3			08/25/12 20:57	1
Chloroethane	ND		2.1		ug/m3			08/25/12 20:57	1
Chloroform	**7.9**		1.5		ug/m3			08/25/12 20:57	1
Chloromethane	ND		1.7		ug/m3			08/25/12 20:57	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			08/25/12 20:57	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 20:57	1
1,3-Dichlorobenzene	**5.8**		2.4		ug/m3			08/25/12 20:57	1
1,4-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 20:57	1
Dichlorodifluoromethane	**2.2**		2.0		ug/m3			08/25/12 20:57	1
1,1-Dichloroethane	ND		1.2		ug/m3			08/25/12 20:57	1
1,2-Dichloroethane	ND		3.2		ug/m3			08/25/12 20:57	1
1,1-Dichloroethene	ND		3.2		ug/m3			08/25/12 20:57	1
cis-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 20:57	1
trans-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 20:57	1
1,2-Dichloropropane	ND		1.8		ug/m3			08/25/12 20:57	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 20:57	1
trans-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 20:57	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8		ug/m3			08/25/12 20:57	1
Ethylbenzene	ND		1.7		ug/m3			08/25/12 20:57	1
4-Ethyltoluene	ND		2.0		ug/m3			08/25/12 20:57	1
Hexachlorobutadiene	ND		4.3		ug/m3			08/25/12 20:57	1
2-Hexanone	**1.9**		1.6		ug/m3			08/25/12 20:57	1
Methylene chloride	**5.4**		1.4		ug/m3			08/25/12 20:57	1
4-Methyl-2-pentanone (MIBK)	ND		1.6		ug/m3			08/25/12 20:57	1
Styrene	**3.1**		1.7		ug/m3			08/25/12 20:57	1
1,1,2,2-Tetrachloroethane	ND		2.7		ug/m3			08/25/12 20:57	1
Tetrachloroethene	**10**		2.7		ug/m3			08/25/12 20:57	1
Toluene	**17**		1.5		ug/m3			08/25/12 20:57	1
1,2,4-Trichlorobenzene	ND		19		ug/m3			08/25/12 20:57	1
1,1,1-Trichloroethane	ND		1.6		ug/m3			08/25/12 20:57	1
1,1,2-Trichloroethane	ND		2.2		ug/m3			08/25/12 20:57	1
Trichloroethene	ND		2.1		ug/m3			08/25/12 20:57	1
Trichlorofluoromethane	ND		2.2		ug/m3			08/25/12 20:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1		ug/m3			08/25/12 20:57	1
1,2,4-Trimethylbenzene	ND		12		ug/m3			08/25/12 20:57	1

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-4
Date Collected: 08/20/12 13:43
Date Received: 08/21/12 10:30
Sample Container: Summa Canister 1L

Lab Sample ID: 340-3569-7
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			08/25/12 20:57	1
Vinyl acetate	ND		2.8		ug/m3			08/25/12 20:57	1
Vinyl chloride	ND		0.51		ug/m3			08/25/12 20:57	1
m,p-Xylene	**3.5**		3.5		ug/m3			08/25/12 20:57	1
o-Xylene	ND		1.7		ug/m3			08/25/12 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/25/12 20:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/25/12 20:57*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*08/25/12 20:57*	*1*

Surrogate Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
340-3569-1	SG-7	103	96	106
340-3569-2	SG-6	105	97	103
340-3569-3	SG-5	103	97	102
340-3569-4	SG-1	102	95	105
340-3569-5	SG-2	102	96	105
340-3569-6	SG-3	105	96	114
340-3569-7	SG-4	103	95	106
LCS 340-2477/4	Lab Control Sample	101	102	101
LCS 340-2481/3	Lab Control Sample	101	100	100
LCS 340-2486/3	Lab Control Sample	102	99	101
LCSD 340-2477/5	Lab Control Sample Dup	102	101	101
LCSD 340-2481/4	Lab Control Sample Dup	102	98	101
LCSD 340-2486/4	Lab Control Sample Dup	102	99	102
MB 340-2477/6	Method Blank	97	98	98
MB 340-2481/5	Method Blank	97	97	98
MB 340-2486/5	Method Blank	97	97	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Method: D1946 - Fixed Gases in Air (GC)

Lab Sample ID: MB 340-2456/11
Matrix: Air
Analysis Batch: 2456

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.020		% v/v			08/23/12 07:17	1

Lab Sample ID: MB 340-2456/8
Matrix: Air
Analysis Batch: 2456

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Helium	ND		0.020		% v/v			08/23/12 06:22	1
Methane (FID)	ND		0.00040		% v/v			08/23/12 06:22	1
Methane (TCD)	ND		0.00040		% v/v			08/23/12 06:22	1

Lab Sample ID: LCS 340-2456/4
Matrix: Air
Analysis Batch: 2456

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane (TCD)			19.8	20.1		% v/v		101	80 - 120		

Lab Sample ID: LCS 340-2456/6
Matrix: Air
Analysis Batch: 2456

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane (FID)			0.0495	0.0537		% v/v		109	80 - 120		

Lab Sample ID: LCS 340-2456/9
Matrix: Air
Analysis Batch: 2456

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Helium			12.5	12.7		% v/v		101	80 - 120		

Lab Sample ID: LCSD 340-2456/10
Matrix: Air
Analysis Batch: 2456

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
Helium			12.5	12.6		% v/v		101	80 - 120	0	20

Lab Sample ID: LCSD 340-2456/5
Matrix: Air
Analysis Batch: 2456

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
Methane (TCD)			19.8	20.0		% v/v		101	80 - 120	0	20

Method: D1946 - Fixed Gases in Air (GC) (Continued)

Lab Sample ID: LCSD 340-2456/7
Matrix: Air
Analysis Batch: 2456

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
Methane (FID)			0.0495	0.0535		% v/v		108	80 - 120	1	20

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 340-2477/6
Matrix: Air
Analysis Batch: 2477

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80		ppb v/v			08/25/12 11:18	1
Benzene	ND		0.30		ppb v/v			08/25/12 11:18	1
Benzyl chloride	ND		0.80		ppb v/v			08/25/12 11:18	1
Bromodichloromethane	ND		0.30		ppb v/v			08/25/12 11:18	1
Bromoform	ND		0.40		ppb v/v			08/25/12 11:18	1
Bromomethane	ND		0.80		ppb v/v			08/25/12 11:18	1
2-Butanone (MEK)	ND		0.80		ppb v/v			08/25/12 11:18	1
Carbon disulfide	ND		0.80		ppb v/v			08/25/12 11:18	1
Carbon tetrachloride	ND		0.80		ppb v/v			08/25/12 11:18	1
Chlorobenzene	ND		0.30		ppb v/v			08/25/12 11:18	1
Dibromochloromethane	ND		0.40		ppb v/v			08/25/12 11:18	1
Chloroethane	ND		0.80		ppb v/v			08/25/12 11:18	1
Chloroform	ND		0.30		ppb v/v			08/25/12 11:18	1
Chloromethane	ND		0.80		ppb v/v			08/25/12 11:18	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			08/25/12 11:18	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 11:18	1
1,3-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 11:18	1
1,4-Dichlorobenzene	ND		0.40		ppb v/v			08/25/12 11:18	1
Dichlorodifluoromethane	ND		0.40		ppb v/v			08/25/12 11:18	1
1,1-Dichloroethane	ND		0.30		ppb v/v			08/25/12 11:18	1
1,2-Dichloroethane	ND		0.80		ppb v/v			08/25/12 11:18	1
1,1-Dichloroethene	ND		0.80		ppb v/v			08/25/12 11:18	1
cis-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 11:18	1
trans-1,2-Dichloroethene	ND		0.40		ppb v/v			08/25/12 11:18	1
1,2-Dichloropropane	ND		0.40		ppb v/v			08/25/12 11:18	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 11:18	1
trans-1,3-Dichloropropene	ND		0.40		ppb v/v			08/25/12 11:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40		ppb v/v			08/25/12 11:18	1
Ethylbenzene	ND		0.40		ppb v/v			08/25/12 11:18	1
4-Ethyltoluene	ND		0.40		ppb v/v			08/25/12 11:18	1
Hexachlorobutadiene	ND		0.40		ppb v/v			08/25/12 11:18	1
2-Hexanone	ND		0.40		ppb v/v			08/25/12 11:18	1
Methylene chloride	ND		0.40		ppb v/v			08/25/12 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.40		ppb v/v			08/25/12 11:18	1
Styrene	ND		0.40		ppb v/v			08/25/12 11:18	1
1,1,2,2-Tetrachloroethane	ND		0.40		ppb v/v			08/25/12 11:18	1
Tetrachloroethene	ND		0.40		ppb v/v			08/25/12 11:18	1
Toluene	ND		0.40		ppb v/v			08/25/12 11:18	1
1,2,4-Trichlorobenzene	ND		2.5		ppb v/v			08/25/12 11:18	1
1,1,1-Trichloroethane	ND		0.30		ppb v/v			08/25/12 11:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-2477/6
Matrix: Air
Analysis Batch: 2477

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.40		ppb v/v			08/25/12 11:18	1
Trichloroethene	ND		0.40		ppb v/v			08/25/12 11:18	1
Trichlorofluoromethane	ND		0.40		ppb v/v			08/25/12 11:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40		ppb v/v			08/25/12 11:18	1
1,2,4-Trimethylbenzene	ND		2.5		ppb v/v			08/25/12 11:18	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			08/25/12 11:18	1
Vinyl acetate	ND		0.80		ppb v/v			08/25/12 11:18	1
Vinyl chloride	ND		0.20		ppb v/v			08/25/12 11:18	1
m,p-Xylene	ND		0.80		ppb v/v			08/25/12 11:18	1
o-Xylene	ND		0.40		ppb v/v			08/25/12 11:18	1
Naphthalene	ND		2.0		ppb v/v			08/25/12 11:18	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9		ug/m3			08/25/12 11:18	1
Benzene	ND		0.96		ug/m3			08/25/12 11:18	1
Benzyl chloride	ND		4.1		ug/m3			08/25/12 11:18	1
Bromodichloromethane	ND		2.0		ug/m3			08/25/12 11:18	1
Bromoform	ND		4.1		ug/m3			08/25/12 11:18	1
Bromomethane	ND		3.1		ug/m3			08/25/12 11:18	1
2-Butanone (MEK)	ND		2.4		ug/m3			08/25/12 11:18	1
Carbon disulfide	ND		2.5		ug/m3			08/25/12 11:18	1
Carbon tetrachloride	ND		5.0		ug/m3			08/25/12 11:18	1
Chlorobenzene	ND		1.4		ug/m3			08/25/12 11:18	1
Dibromochloromethane	ND		3.4		ug/m3			08/25/12 11:18	1
Chloroethane	ND		2.1		ug/m3			08/25/12 11:18	1
Chloroform	ND		1.5		ug/m3			08/25/12 11:18	1
Chloromethane	ND		1.7		ug/m3			08/25/12 11:18	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			08/25/12 11:18	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 11:18	1
1,3-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 11:18	1
1,4-Dichlorobenzene	ND		2.4		ug/m3			08/25/12 11:18	1
Dichlorodifluoromethane	ND		2.0		ug/m3			08/25/12 11:18	1
1,1-Dichloroethane	ND		1.2		ug/m3			08/25/12 11:18	1
1,2-Dichloroethane	ND		3.2		ug/m3			08/25/12 11:18	1
1,1-Dichloroethene	ND		3.2		ug/m3			08/25/12 11:18	1
cis-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 11:18	1
trans-1,2-Dichloroethene	ND		1.6		ug/m3			08/25/12 11:18	1
1,2-Dichloropropane	ND		1.8		ug/m3			08/25/12 11:18	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 11:18	1
trans-1,3-Dichloropropene	ND		1.8		ug/m3			08/25/12 11:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8		ug/m3			08/25/12 11:18	1
Ethylbenzene	ND		1.7		ug/m3			08/25/12 11:18	1
4-Ethyltoluene	ND		2.0		ug/m3			08/25/12 11:18	1
Hexachlorobutadiene	ND		4.3		ug/m3			08/25/12 11:18	1
2-Hexanone	ND		1.6		ug/m3			08/25/12 11:18	1
Methylene chloride	ND		1.4		ug/m3			08/25/12 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		1.6		ug/m3			08/25/12 11:18	1
Styrene	ND		1.7		ug/m3			08/25/12 11:18	1
1,1,2,2-Tetrachloroethane	ND		2.7		ug/m3			08/25/12 11:18	1
Tetrachloroethene	ND		2.7		ug/m3			08/25/12 11:18	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-2477/6
Matrix: Air
Analysis Batch: 2477

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.5		ug/m3			08/25/12 11:18	1
1,2,4-Trichlorobenzene	ND		19		ug/m3			08/25/12 11:18	1
1,1,1-Trichloroethane	ND		1.6		ug/m3			08/25/12 11:18	1
1,1,2-Trichloroethane	ND		2.2		ug/m3			08/25/12 11:18	1
Trichloroethene	ND		2.1		ug/m3			08/25/12 11:18	1
Trichlorofluoromethane	ND		2.2		ug/m3			08/25/12 11:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1		ug/m3			08/25/12 11:18	1
1,2,4-Trimethylbenzene	ND		12		ug/m3			08/25/12 11:18	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			08/25/12 11:18	1
Vinyl acetate	ND		2.8		ug/m3			08/25/12 11:18	1
Vinyl chloride	ND		0.51		ug/m3			08/25/12 11:18	1
m,p-Xylene	ND		3.5		ug/m3			08/25/12 11:18	1
o-Xylene	ND		1.7		ug/m3			08/25/12 11:18	1
Naphthalene	ND		10		ug/m3			08/25/12 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/25/12 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/25/12 11:18*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/25/12 11:18*	*1*

Lab Sample ID: LCS 340-2477/4
Matrix: Air
Analysis Batch: 2477

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.4		ppb v/v		104	70 - 130
Benzene	10.0	10.2		ppb v/v		102	70 - 130
Benzyl chloride	10.8	12.1		ppb v/v		112	70 - 130
Bromodichloromethane	10.0	11.2		ppb v/v		112	70 - 130
Bromoform	10.0	12.1		ppb v/v		121	70 - 130
Bromomethane	10.0	11.0		ppb v/v		110	70 - 130
2-Butanone (MEK)	10.6	8.28		ppb v/v		78	70 - 130
Carbon disulfide	10.0	10.7		ppb v/v		107	70 - 130
Carbon tetrachloride	10.0	10.9		ppb v/v		109	70 - 130
Chlorobenzene	10.7	9.80		ppb v/v		92	70 - 130
Dibromochloromethane	11.5	11.1		ppb v/v		97	70 - 130
Chloroethane	10.0	11.6		ppb v/v		116	70 - 130
Chloroform	10.0	10.0		ppb v/v		100	70 - 130
Chloromethane	10.0	10.7		ppb v/v		107	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130
1,2-Dichlorobenzene	10.7	10.7		ppb v/v		100	70 - 130
1,3-Dichlorobenzene	10.8	10.6		ppb v/v		99	70 - 130
1,4-Dichlorobenzene	10.0	10.5		ppb v/v		105	70 - 130
Dichlorodifluoromethane	10.0	11.0		ppb v/v		110	70 - 130
1,1-Dichloroethane	10.0	9.97		ppb v/v		100	70 - 130
1,2-Dichloroethane	10.0	10.9		ppb v/v		109	70 - 130
1,1-Dichloroethene	10.0	10.2		ppb v/v		102	70 - 130
cis-1,2-Dichloroethene	10.0	9.78		ppb v/v		98	70 - 130
trans-1,2-Dichloroethene	10.0	10.2		ppb v/v		102	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-2477/4
Matrix: Air
Analysis Batch: 2477

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	10.0	10.3		ppb v/v		103	70 - 130
cis-1,3-Dichloropropene	10.6	11.1		ppb v/v		105	70 - 130
trans-1,3-Dichloropropene	10.0	10.2		ppb v/v		102	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.4		ppb v/v		114	70 - 130
Ethylbenzene	10.6	10.3		ppb v/v		97	70 - 130
4-Ethyltoluene	10.0	10.3		ppb v/v		103	70 - 130
Hexachlorobutadiene	10.0	11.2		ppb v/v		112	70 - 130
2-Hexanone	10.0	10.4		ppb v/v		104	70 - 130
Methylene chloride	10.0	9.70		ppb v/v		97	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	11.0		ppb v/v		100	70 - 130
Styrene	10.7	10.9		ppb v/v		102	70 - 130
1,1,2,2-Tetrachloroethane	10.8	10.7		ppb v/v		99	70 - 130
Tetrachloroethene	10.0	10.0		ppb v/v		100	70 - 130
Toluene	10.0	10.3		ppb v/v		103	70 - 130
1,2,4-Trichlorobenzene	10.0	11.0		ppb v/v		110	70 - 130
1,1,1-Trichloroethane	10.0	10.2		ppb v/v		102	70 - 130
1,1,2-Trichloroethane	10.0	10.3		ppb v/v		103	70 - 130
Trichloroethene	10.0	10.2		ppb v/v		102	70 - 130
Trichlorofluoromethane	10.0	10.5		ppb v/v		105	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.73		ppb v/v		97	70 - 130
1,2,4-Trimethylbenzene	10.0	10.3		ppb v/v		103	70 - 130
1,3,5-Trimethylbenzene	10.7	10.6		ppb v/v		99	70 - 130
Vinyl acetate	10.8	10.7		ppb v/v		99	70 - 130
Vinyl chloride	10.0	11.0		ppb v/v		110	70 - 130
m,p-Xylene	20.0	21.4		ppb v/v		107	70 - 130
o-Xylene	10.8	10.5		ppb v/v		97	70 - 130
Naphthalene	10.0	10.6		ppb v/v		106	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	24.6		ug/m3		104	70 - 130
Benzene	32	32.5		ug/m3		102	70 - 130
Benzyl chloride	56	62.8		ug/m3		112	70 - 130
Bromodichloromethane	67	75.4		ug/m3		112	70 - 130
Bromoform	100	125		ug/m3		121	70 - 130
Bromomethane	39	42.6		ug/m3		110	70 - 130
2-Butanone (MEK)	31	24.4		ug/m3		78	70 - 130
Carbon disulfide	31	33.3		ug/m3		107	70 - 130
Carbon tetrachloride	63	68.8		ug/m3		109	70 - 130
Chlorobenzene	49	45.0		ug/m3		92	70 - 130
Dibromochloromethane	98	94.7		ug/m3		97	70 - 130
Chloroethane	26	30.6		ug/m3		116	70 - 130
Chloroform	49	48.9		ug/m3		100	70 - 130
Chloromethane	21	22.2		ug/m3		107	70 - 130
1,2-Dibromoethane (EDB)	77	79.3		ug/m3		103	70 - 130
1,2-Dichlorobenzene	64	64.2		ug/m3		100	70 - 130
1,3-Dichlorobenzene	65	64.0		ug/m3		99	70 - 130
1,4-Dichlorobenzene	60	62.9		ug/m3		105	70 - 130
Dichlorodifluoromethane	49	54.4		ug/m3		110	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-2477/4
Matrix: Air
Analysis Batch: 2477

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	40	40.4		ug/m3		100	70 - 130
1,2-Dichloroethane	40	44.1		ug/m3		109	70 - 130
1,1-Dichloroethene	40	40.4		ug/m3		102	70 - 130
cis-1,2-Dichloroethene	40	38.8		ug/m3		98	70 - 130
trans-1,2-Dichloroethene	40	40.5		ug/m3		102	70 - 130
1,2-Dichloropropane	46	47.5		ug/m3		103	70 - 130
cis-1,3-Dichloropropene	48	50.5		ug/m3		105	70 - 130
trans-1,3-Dichloropropene	45	46.4		ug/m3		102	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	79.7		ug/m3		114	70 - 130
Ethylbenzene	46	44.6		ug/m3		97	70 - 130
4-Ethyltoluene	49	50.7		ug/m3		103	70 - 130
Hexachlorobutadiene	110	120		ug/m3		112	70 - 130
2-Hexanone	41	42.6		ug/m3		104	70 - 130
Methylene chloride	35	33.7		ug/m3		97	70 - 130
4-Methyl-2-pentanone (MIBK)	45	45.2		ug/m3		100	70 - 130
Styrene	46	46.5		ug/m3		102	70 - 130
1,1,2,2-Tetrachloroethane	74	73.7		ug/m3		99	70 - 130
Tetrachloroethene	68	68.1		ug/m3		100	70 - 130
Toluene	38	39.0		ug/m3		103	70 - 130
1,2,4-Trichlorobenzene	74	81.6		ug/m3		110	70 - 130
1,1,1-Trichloroethane	55	55.4		ug/m3		102	70 - 130
1,1,2-Trichloroethane	55	56.4		ug/m3		103	70 - 130
Trichloroethene	54	54.9		ug/m3		102	70 - 130
Trichlorofluoromethane	56	58.8		ug/m3		105	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	77	74.6		ug/m3		97	70 - 130
1,2,4-Trimethylbenzene	49	50.5		ug/m3		103	70 - 130
1,3,5-Trimethylbenzene	53	51.9		ug/m3		99	70 - 130
Vinyl acetate	38	37.6		ug/m3		99	70 - 130
Vinyl chloride	26	28.2		ug/m3		110	70 - 130
m,p-Xylene	87	92.8		ug/m3		107	70 - 130
o-Xylene	47	45.5		ug/m3		97	70 - 130
Naphthalene	52	55.7		ug/m3		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 340-2477/5
Matrix: Air
Analysis Batch: 2477

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	10.0	10.2		ppb v/v		102	70 - 130	2	25
Benzene	10.0	10.2		ppb v/v		102	70 - 130	0	25
Benzyl chloride	10.8	12.2		ppb v/v		113	70 - 130	0	25
Bromodichloromethane	10.0	11.3		ppb v/v		113	70 - 130	0	25
Bromoform	10.0	12.1		ppb v/v		121	70 - 130	0	25

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2477/5
Matrix: Air
Analysis Batch: 2477

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
Bromomethane	10.0	9.70		ppb v/v		97	70 - 130	12	25
2-Butanone (MEK)	10.6	8.25		ppb v/v		78	70 - 130	0	25
Carbon disulfide	10.0	10.5		ppb v/v		105	70 - 130	2	25
Carbon tetrachloride	10.0	11.0		ppb v/v		110	70 - 130	1	25
Chlorobenzene	10.7	9.82		ppb v/v		92	70 - 130	0	25
Dibromochloromethane	11.5	11.2		ppb v/v		97	70 - 130	1	25
Chloroethane	10.0	10.2		ppb v/v		102	70 - 130	13	25
Chloroform	10.0	9.93		ppb v/v		99	70 - 130	1	25
Chloromethane	10.0	9.97		ppb v/v		100	70 - 130	7	25
1,2-Dibromoethane (EDB)	10.0	10.4		ppb v/v		104	70 - 130	0	25
1,2-Dichlorobenzene	10.7	10.7		ppb v/v		100	70 - 130	0	25
1,3-Dichlorobenzene	10.8	10.6		ppb v/v		98	70 - 130	1	25
1,4-Dichlorobenzene	10.0	10.5		ppb v/v		105	70 - 130	0	25
Dichlorodifluoromethane	10.0	11.0		ppb v/v		110	70 - 130	0	25
1,1-Dichloroethane	10.0	9.74		ppb v/v		97	70 - 130	2	25
1,2-Dichloroethane	10.0	10.9		ppb v/v		109	70 - 130	0	25
1,1-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130	1	25
cis-1,2-Dichloroethene	10.0	9.61		ppb v/v		96	70 - 130	2	25
trans-1,2-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,2-Dichloropropane	10.0	10.3		ppb v/v		103	70 - 130	0	25
cis-1,3-Dichloropropene	10.6	11.1		ppb v/v		105	70 - 130	0	25
trans-1,3-Dichloropropene	10.0	10.4		ppb v/v		104	70 - 130	2	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.1		ppb v/v		111	70 - 130	2	25
Ethylbenzene	10.6	10.3		ppb v/v		97	70 - 130	0	25
4-Ethyltoluene	10.0	10.0		ppb v/v		100	70 - 130	3	25
Hexachlorobutadiene	10.0	11.2		ppb v/v		112	70 - 130	0	25
2-Hexanone	10.0	10.5		ppb v/v		105	70 - 130	1	25
Methylene chloride	10.0	9.52		ppb v/v		95	70 - 130	2	25
4-Methyl-2-pentanone (MIBK)	11.0	11.1		ppb v/v		101	70 - 130	1	25
Styrene	10.7	10.9		ppb v/v		102	70 - 130	0	25
1,1,2,2-Tetrachloroethane	10.8	10.8		ppb v/v		100	70 - 130	0	25
Tetrachloroethene	10.0	10.0		ppb v/v		100	70 - 130	0	25
Toluene	10.0	10.3		ppb v/v		103	70 - 130	0	25
1,2,4-Trichlorobenzene	10.0	10.9		ppb v/v		109	70 - 130	1	25
1,1,1-Trichloroethane	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,1,2-Trichloroethane	10.0	10.4		ppb v/v		104	70 - 130	1	25
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130	1	25
Trichlorofluoromethane	10.0	10.3		ppb v/v		103	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.52		ppb v/v		95	70 - 130	2	25
1,2,4-Trimethylbenzene	10.0	10.3		ppb v/v		103	70 - 130	0	25
1,3,5-Trimethylbenzene	10.7	10.9		ppb v/v		102	70 - 130	3	25
Vinyl acetate	10.8	10.7		ppb v/v		99	70 - 130	0	25
Vinyl chloride	10.0	10.4		ppb v/v		104	70 - 130	6	25
m,p-Xylene	20.0	21.4		ppb v/v		107	70 - 130	0	25
o-Xylene	10.8	10.5		ppb v/v		97	70 - 130	0	25
Naphthalene	10.0	10.4		ppb v/v		104	70 - 130	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2477/5
Matrix: Air
Analysis Batch: 2477

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	24	24.2		ug/m3		102	70 - 130	2	25
Benzene	32	32.5		ug/m3		102	70 - 130	0	25
Benzyl chloride	56	63.0		ug/m3		113	70 - 130	0	25
Bromodichloromethane	67	75.7		ug/m3		113	70 - 130	0	25
Bromoform	100	125		ug/m3		121	70 - 130	0	25
Bromomethane	39	37.7		ug/m3		97	70 - 130	12	25
2-Butanone (MEK)	31	24.3		ug/m3		78	70 - 130	0	25
Carbon disulfide	31	32.7		ug/m3		105	70 - 130	2	25
Carbon tetrachloride	63	69.2		ug/m3		110	70 - 130	1	25
Chlorobenzene	49	45.1		ug/m3		92	70 - 130	0	25
Dibromochloromethane	98	95.4		ug/m3		97	70 - 130	1	25
Chloroethane	26	26.9		ug/m3		102	70 - 130	13	25
Chloroform	49	48.5		ug/m3		99	70 - 130	1	25
Chloromethane	21	20.6		ug/m3		100	70 - 130	7	25
1,2-Dibromoethane (EDB)	77	79.5		ug/m3		104	70 - 130	0	25
1,2-Dichlorobenzene	64	64.1		ug/m3		100	70 - 130	0	25
1,3-Dichlorobenzene	65	63.5		ug/m3		98	70 - 130	1	25
1,4-Dichlorobenzene	60	62.9		ug/m3		105	70 - 130	0	25
Dichlorodifluoromethane	49	54.6		ug/m3		110	70 - 130	0	25
1,1-Dichloroethane	40	39.4		ug/m3		97	70 - 130	2	25
1,2-Dichloroethane	40	44.2		ug/m3		109	70 - 130	0	25
1,1-Dichloroethene	40	40.0		ug/m3		101	70 - 130	1	25
cis-1,2-Dichloroethene	40	38.1		ug/m3		96	70 - 130	2	25
trans-1,2-Dichloroethene	40	40.0		ug/m3		101	70 - 130	1	25
1,2-Dichloropropane	46	47.5		ug/m3		103	70 - 130	0	25
cis-1,3-Dichloropropene	48	50.5		ug/m3		105	70 - 130	0	25
trans-1,3-Dichloropropene	45	47.2		ug/m3		104	70 - 130	2	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	77.7		ug/m3		111	70 - 130	2	25
Ethylbenzene	46	44.8		ug/m3		97	70 - 130	0	25
4-Ethyltoluene	49	49.2		ug/m3		100	70 - 130	3	25
Hexachlorobutadiene	110	120		ug/m3		112	70 - 130	0	25
2-Hexanone	41	43.1		ug/m3		105	70 - 130	1	25
Methylene chloride	35	33.1		ug/m3		95	70 - 130	2	25
4-Methyl-2-pentanone (MIBK)	45	45.6		ug/m3		101	70 - 130	1	25
Styrene	46	46.6		ug/m3		102	70 - 130	0	25
1,1,2,2-Tetrachloroethane	74	74.0		ug/m3		100	70 - 130	0	25
Tetrachloroethene	68	68.2		ug/m3		100	70 - 130	0	25
Toluene	38	38.9		ug/m3		103	70 - 130	0	25
1,2,4-Trichlorobenzene	74	80.7		ug/m3		109	70 - 130	1	25
1,1,1-Trichloroethane	55	54.9		ug/m3		101	70 - 130	1	25
1,1,2-Trichloroethane	55	56.9		ug/m3		104	70 - 130	1	25
Trichloroethene	54	54.5		ug/m3		101	70 - 130	1	25
Trichlorofluoromethane	56	57.8		ug/m3		103	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane	77	73.0		ug/m3		95	70 - 130	2	25
1,2,4-Trimethylbenzene	49	50.5		ug/m3		103	70 - 130	0	25
1,3,5-Trimethylbenzene	53	53.4		ug/m3		102	70 - 130	3	25
Vinyl acetate	38	37.5		ug/m3		99	70 - 130	0	25
Vinyl chloride	26	26.5		ug/m3		104	70 - 130	6	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2477/5
Matrix: Air
Analysis Batch: 2477

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
m,p-Xylene			87	92.7		ug/m3		107	70 - 130	0	25
o-Xylene			47	45.6		ug/m3		97	70 - 130	0	25
Naphthalene			52	54.5		ug/m3		104	70 - 130	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 340-2481/5
Matrix: Air
Analysis Batch: 2481

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80		ppb v/v			08/26/12 11:20	1
Benzene	ND		0.30		ppb v/v			08/26/12 11:20	1
Benzyl chloride	ND		0.80		ppb v/v			08/26/12 11:20	1
Bromodichloromethane	ND		0.30		ppb v/v			08/26/12 11:20	1
Bromoform	ND		0.40		ppb v/v			08/26/12 11:20	1
Bromomethane	ND		0.80		ppb v/v			08/26/12 11:20	1
2-Butanone (MEK)	ND		0.80		ppb v/v			08/26/12 11:20	1
Carbon disulfide	ND		0.80		ppb v/v			08/26/12 11:20	1
Carbon tetrachloride	ND		0.80		ppb v/v			08/26/12 11:20	1
Chlorobenzene	ND		0.30		ppb v/v			08/26/12 11:20	1
Dibromochloromethane	ND		0.40		ppb v/v			08/26/12 11:20	1
Chloroethane	ND		0.80		ppb v/v			08/26/12 11:20	1
Chloroform	ND		0.30		ppb v/v			08/26/12 11:20	1
Chloromethane	ND		0.80		ppb v/v			08/26/12 11:20	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			08/26/12 11:20	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			08/26/12 11:20	1
1,3-Dichlorobenzene	ND		0.40		ppb v/v			08/26/12 11:20	1
1,4-Dichlorobenzene	ND		0.40		ppb v/v			08/26/12 11:20	1
Dichlorodifluoromethane	ND		0.40		ppb v/v			08/26/12 11:20	1
1,1-Dichloroethane	ND		0.30		ppb v/v			08/26/12 11:20	1
1,2-Dichloroethane	ND		0.80		ppb v/v			08/26/12 11:20	1
1,1-Dichloroethene	ND		0.80		ppb v/v			08/26/12 11:20	1
cis-1,2-Dichloroethene	ND		0.40		ppb v/v			08/26/12 11:20	1
trans-1,2-Dichloroethene	ND		0.40		ppb v/v			08/26/12 11:20	1
1,2-Dichloropropane	ND		0.40		ppb v/v			08/26/12 11:20	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			08/26/12 11:20	1
trans-1,3-Dichloropropene	ND		0.40		ppb v/v			08/26/12 11:20	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40		ppb v/v			08/26/12 11:20	1
Ethylbenzene	ND		0.40		ppb v/v			08/26/12 11:20	1
4-Ethyltoluene	ND		0.40		ppb v/v			08/26/12 11:20	1
Hexachlorobutadiene	ND		0.40		ppb v/v			08/26/12 11:20	1
2-Hexanone	ND		0.40		ppb v/v			08/26/12 11:20	1
Methylene chloride	ND		0.40		ppb v/v			08/26/12 11:20	1
4-Methyl-2-pentanone (MIBK)	ND		0.40		ppb v/v			08/26/12 11:20	1
Styrene	ND		0.40		ppb v/v			08/26/12 11:20	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-2481/5
Matrix: Air
Analysis Batch: 2481

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.40		ppb v/v			08/26/12 11:20	1
Tetrachloroethene	ND		0.40		ppb v/v			08/26/12 11:20	1
Toluene	ND		0.40		ppb v/v			08/26/12 11:20	1
1,2,4-Trichlorobenzene	ND		2.5		ppb v/v			08/26/12 11:20	1
1,1,1-Trichloroethane	ND		0.30		ppb v/v			08/26/12 11:20	1
1,1,2-Trichloroethane	ND		0.40		ppb v/v			08/26/12 11:20	1
Trichloroethene	ND		0.40		ppb v/v			08/26/12 11:20	1
Trichlorofluoromethane	ND		0.40		ppb v/v			08/26/12 11:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40		ppb v/v			08/26/12 11:20	1
1,2,4-Trimethylbenzene	ND		2.5		ppb v/v			08/26/12 11:20	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			08/26/12 11:20	1
Vinyl acetate	ND		0.80		ppb v/v			08/26/12 11:20	1
Vinyl chloride	ND		0.20		ppb v/v			08/26/12 11:20	1
m,p-Xylene	ND		0.80		ppb v/v			08/26/12 11:20	1
o-Xylene	ND		0.40		ppb v/v			08/26/12 11:20	1
Naphthalene	ND		2.0		ppb v/v			08/26/12 11:20	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9		ug/m3			08/26/12 11:20	1
Benzene	ND		0.96		ug/m3			08/26/12 11:20	1
Benzyl chloride	ND		4.1		ug/m3			08/26/12 11:20	1
Bromodichloromethane	ND		2.0		ug/m3			08/26/12 11:20	1
Bromoform	ND		4.1		ug/m3			08/26/12 11:20	1
Bromomethane	ND		3.1		ug/m3			08/26/12 11:20	1
2-Butanone (MEK)	ND		2.4		ug/m3			08/26/12 11:20	1
Carbon disulfide	ND		2.5		ug/m3			08/26/12 11:20	1
Carbon tetrachloride	ND		5.0		ug/m3			08/26/12 11:20	1
Chlorobenzene	ND		1.4		ug/m3			08/26/12 11:20	1
Dibromochloromethane	ND		3.4		ug/m3			08/26/12 11:20	1
Chloroethane	ND		2.1		ug/m3			08/26/12 11:20	1
Chloroform	ND		1.5		ug/m3			08/26/12 11:20	1
Chloromethane	ND		1.7		ug/m3			08/26/12 11:20	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			08/26/12 11:20	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			08/26/12 11:20	1
1,3-Dichlorobenzene	ND		2.4		ug/m3			08/26/12 11:20	1
1,4-Dichlorobenzene	ND		2.4		ug/m3			08/26/12 11:20	1
Dichlorodifluoromethane	ND		2.0		ug/m3			08/26/12 11:20	1
1,1-Dichloroethane	ND		1.2		ug/m3			08/26/12 11:20	1
1,2-Dichloroethane	ND		3.2		ug/m3			08/26/12 11:20	1
1,1-Dichloroethene	ND		3.2		ug/m3			08/26/12 11:20	1
cis-1,2-Dichloroethene	ND		1.6		ug/m3			08/26/12 11:20	1
trans-1,2-Dichloroethene	ND		1.6		ug/m3			08/26/12 11:20	1
1,2-Dichloropropane	ND		1.8		ug/m3			08/26/12 11:20	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			08/26/12 11:20	1
trans-1,3-Dichloropropene	ND		1.8		ug/m3			08/26/12 11:20	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8		ug/m3			08/26/12 11:20	1
Ethylbenzene	ND		1.7		ug/m3			08/26/12 11:20	1
4-Ethyltoluene	ND		2.0		ug/m3			08/26/12 11:20	1
Hexachlorobutadiene	ND		4.3		ug/m3			08/26/12 11:20	1
2-Hexanone	ND		1.6		ug/m3			08/26/12 11:20	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-2481/5
Matrix: Air
Analysis Batch: 2481

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene chloride	ND		1.4		ug/m3			08/26/12 11:20	1
4-Methyl-2-pentanone (MIBK)	ND		1.6		ug/m3			08/26/12 11:20	1
Styrene	ND		1.7		ug/m3			08/26/12 11:20	1
1,1,2,2-Tetrachloroethane	ND		2.7		ug/m3			08/26/12 11:20	1
Tetrachloroethene	ND		2.7		ug/m3			08/26/12 11:20	1
Toluene	ND		1.5		ug/m3			08/26/12 11:20	1
1,2,4-Trichlorobenzene	ND		19		ug/m3			08/26/12 11:20	1
1,1,1-Trichloroethane	ND		1.6		ug/m3			08/26/12 11:20	1
1,1,2-Trichloroethane	ND		2.2		ug/m3			08/26/12 11:20	1
Trichloroethene	ND		2.1		ug/m3			08/26/12 11:20	1
Trichlorofluoromethane	ND		2.2		ug/m3			08/26/12 11:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1		ug/m3			08/26/12 11:20	1
1,2,4-Trimethylbenzene	ND		12		ug/m3			08/26/12 11:20	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			08/26/12 11:20	1
Vinyl acetate	ND		2.8		ug/m3			08/26/12 11:20	1
Vinyl chloride	ND		0.51		ug/m3			08/26/12 11:20	1
m,p-Xylene	ND		3.5		ug/m3			08/26/12 11:20	1
o-Xylene	ND		1.7		ug/m3			08/26/12 11:20	1
Naphthalene	ND		10		ug/m3			08/26/12 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/12 11:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/12 11:20*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/26/12 11:20*	*1*

Lab Sample ID: LCS 340-2481/3
Matrix: Air
Analysis Batch: 2481

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.3		ppb v/v		103	70 - 130
Benzene	10.0	10.2		ppb v/v		102	70 - 130
Benzyl chloride	10.8	12.1		ppb v/v		112	70 - 130
Bromodichloromethane	10.0	11.5		ppb v/v		115	70 - 130
Bromoform	10.0	12.3		ppb v/v		123	70 - 130
Bromomethane	10.0	10.5		ppb v/v		105	70 - 130
2-Butanone (MEK)	10.6	8.22		ppb v/v		78	70 - 130
Carbon disulfide	10.0	10.5		ppb v/v		105	70 - 130
Carbon tetrachloride	10.0	11.2		ppb v/v		112	70 - 130
Chlorobenzene	10.7	9.73		ppb v/v		91	70 - 130
Dibromochloromethane	11.5	11.3		ppb v/v		98	70 - 130
Chloroethane	10.0	11.1		ppb v/v		111	70 - 130
Chloroform	10.0	9.92		ppb v/v		99	70 - 130
Chloromethane	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130
1,2-Dichlorobenzene	10.7	10.5		ppb v/v		98	70 - 130
1,3-Dichlorobenzene	10.8	10.4		ppb v/v		97	70 - 130
1,4-Dichlorobenzene	10.0	10.3		ppb v/v		103	70 - 130
Dichlorodifluoromethane	10.0	10.8		ppb v/v		108	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-2481/3
Matrix: Air
Analysis Batch: 2481

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	10.0	9.81		ppb v/v		98	70 - 130
1,2-Dichloroethane	10.0	10.9		ppb v/v		109	70 - 130
1,1-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130
cis-1,2-Dichloroethene	10.0	9.71		ppb v/v		97	70 - 130
trans-1,2-Dichloroethene	10.0	10.0		ppb v/v		100	70 - 130
1,2-Dichloropropane	10.0	10.3		ppb v/v		103	70 - 130
cis-1,3-Dichloropropene	10.6	11.2		ppb v/v		106	70 - 130
trans-1,3-Dichloropropene	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.1		ppb v/v		111	70 - 130
Ethylbenzene	10.6	10.3		ppb v/v		97	70 - 130
4-Ethyltoluene	10.0	10.1		ppb v/v		101	70 - 130
Hexachlorobutadiene	10.0	11.3		ppb v/v		113	70 - 130
2-Hexanone	10.0	10.6		ppb v/v		106	70 - 130
Methylene chloride	10.0	9.55		ppb v/v		95	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	11.2		ppb v/v		102	70 - 130
Styrene	10.7	10.9		ppb v/v		102	70 - 130
1,1,2,2-Tetrachloroethane	10.8	10.7		ppb v/v		99	70 - 130
Tetrachloroethene	10.0	10.1		ppb v/v		101	70 - 130
Toluene	10.0	10.4		ppb v/v		104	70 - 130
1,2,4-Trichlorobenzene	10.0	10.9		ppb v/v		109	70 - 130
1,1,1-Trichloroethane	10.0	10.1		ppb v/v		101	70 - 130
1,1,2-Trichloroethane	10.0	10.3		ppb v/v		103	70 - 130
Trichloroethene	10.0	10.2		ppb v/v		102	70 - 130
Trichlorofluoromethane	10.0	10.2		ppb v/v		102	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.44		ppb v/v		94	70 - 130
1,2,4-Trimethylbenzene	10.0	10.1		ppb v/v		101	70 - 130
1,3,5-Trimethylbenzene	10.7	10.6		ppb v/v		99	70 - 130
Vinyl acetate	10.8	10.8		ppb v/v		100	70 - 130
Vinyl chloride	10.0	10.7		ppb v/v		107	70 - 130
m,p-Xylene	20.0	21.4		ppb v/v		107	70 - 130
o-Xylene	10.8	10.5		ppb v/v		97	70 - 130
Naphthalene	10.0	10.5		ppb v/v		105	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	24.5		ug/m3		103	70 - 130
Benzene	32	32.6		ug/m3		102	70 - 130
Benzyl chloride	56	62.9		ug/m3		112	70 - 130
Bromodichloromethane	67	76.8		ug/m3		115	70 - 130
Bromoform	100	128		ug/m3		123	70 - 130
Bromomethane	39	40.8		ug/m3		105	70 - 130
2-Butanone (MEK)	31	24.3		ug/m3		78	70 - 130
Carbon disulfide	31	32.7		ug/m3		105	70 - 130
Carbon tetrachloride	63	70.2		ug/m3		112	70 - 130
Chlorobenzene	49	44.7		ug/m3		91	70 - 130
Dibromochloromethane	98	96.4		ug/m3		98	70 - 130
Chloroethane	26	29.2		ug/m3		111	70 - 130
Chloroform	49	48.4		ug/m3		99	70 - 130
Chloromethane	21	21.4		ug/m3		104	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-2481/3
Matrix: Air
Analysis Batch: 2481

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	77	79.4		ug/m3		103	70 - 130
1,2-Dichlorobenzene	64	63.1		ug/m3		98	70 - 130
1,3-Dichlorobenzene	65	62.8		ug/m3		97	70 - 130
1,4-Dichlorobenzene	60	62.1		ug/m3		103	70 - 130
Dichlorodifluoromethane	49	53.5		ug/m3		108	70 - 130
1,1-Dichloroethane	40	39.7		ug/m3		98	70 - 130
1,2-Dichloroethane	40	44.1		ug/m3		109	70 - 130
1,1-Dichloroethene	40	39.9		ug/m3		101	70 - 130
cis-1,2-Dichloroethene	40	38.5		ug/m3		97	70 - 130
trans-1,2-Dichloroethene	40	39.7		ug/m3		100	70 - 130
1,2-Dichloropropane	46	47.8		ug/m3		103	70 - 130
cis-1,3-Dichloropropene	48	50.8		ug/m3		106	70 - 130
trans-1,3-Dichloropropene	45	47.2		ug/m3		104	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	77.8		ug/m3		111	70 - 130
Ethylbenzene	46	44.7		ug/m3		97	70 - 130
4-Ethyltoluene	49	49.5		ug/m3		101	70 - 130
Hexachlorobutadiene	110	121		ug/m3		113	70 - 130
2-Hexanone	41	43.2		ug/m3		106	70 - 130
Methylene chloride	35	33.2		ug/m3		95	70 - 130
4-Methyl-2-pentanone (MIBK)	45	46.0		ug/m3		102	70 - 130
Styrene	46	46.4		ug/m3		102	70 - 130
1,1,2,2-Tetrachloroethane	74	73.4		ug/m3		99	70 - 130
Tetrachloroethene	68	68.3		ug/m3		101	70 - 130
Toluene	38	39.2		ug/m3		104	70 - 130
1,2,4-Trichlorobenzene	74	81.2		ug/m3		109	70 - 130
1,1,1-Trichloroethane	55	55.3		ug/m3		101	70 - 130
1,1,2-Trichloroethane	55	56.5		ug/m3		103	70 - 130
Trichloroethene	54	54.9		ug/m3		102	70 - 130
Trichlorofluoromethane	56	57.5		ug/m3		102	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	77	72.3		ug/m3		94	70 - 130
1,2,4-Trimethylbenzene	49	49.7		ug/m3		101	70 - 130
1,3,5-Trimethylbenzene	53	52.0		ug/m3		99	70 - 130
Vinyl acetate	38	37.9		ug/m3		100	70 - 130
Vinyl chloride	26	27.4		ug/m3		107	70 - 130
m,p-Xylene	87	92.8		ug/m3		107	70 - 130
o-Xylene	47	45.5		ug/m3		97	70 - 130
Naphthalene	52	55.2		ug/m3		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2481/4
Matrix: Air
Analysis Batch: 2481

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	10.0	10.1		ppb v/v		101	70 - 130	2	25
Benzene	10.0	10.2		ppb v/v		102	70 - 130	0	25
Benzyl chloride	10.8	12.2		ppb v/v		113	70 - 130	0	25
Bromodichloromethane	10.0	11.4		ppb v/v		114	70 - 130	0	25
Bromoform	10.0	12.6		ppb v/v		126	70 - 130	2	25
Bromomethane	10.0	10.2		ppb v/v		102	70 - 130	3	25
2-Butanone (MEK)	10.6	8.11		ppb v/v		76	70 - 130	1	25
Carbon disulfide	10.0	10.4		ppb v/v		104	70 - 130	1	25
Carbon tetrachloride	10.0	11.1		ppb v/v		111	70 - 130	0	25
Chlorobenzene	10.7	9.77		ppb v/v		91	70 - 130	0	25
Dibromochloromethane	11.5	11.5		ppb v/v		100	70 - 130	1	25
Chloroethane	10.0	10.9		ppb v/v		109	70 - 130	2	25
Chloroform	10.0	9.80		ppb v/v		98	70 - 130	1	25
Chloromethane	10.0	10.0		ppb v/v		100	70 - 130	4	25
1,2-Dibromoethane (EDB)	10.0	10.4		ppb v/v		104	70 - 130	1	25
1,2-Dichlorobenzene	10.7	10.5		ppb v/v		99	70 - 130	0	25
1,3-Dichlorobenzene	10.8	10.5		ppb v/v		98	70 - 130	1	25
1,4-Dichlorobenzene	10.0	10.5		ppb v/v		105	70 - 130	1	25
Dichlorodifluoromethane	10.0	10.7		ppb v/v		107	70 - 130	1	25
1,1-Dichloroethane	10.0	9.69		ppb v/v		97	70 - 130	1	25
1,2-Dichloroethane	10.0	10.9		ppb v/v		109	70 - 130	0	25
1,1-Dichloroethene	10.0	9.96		ppb v/v		100	70 - 130	1	25
cis-1,2-Dichloroethene	10.0	9.53		ppb v/v		95	70 - 130	2	25
trans-1,2-Dichloroethene	10.0	9.99		ppb v/v		100	70 - 130	0	25
1,2-Dichloropropane	10.0	10.5		ppb v/v		105	70 - 130	1	25
cis-1,3-Dichloropropene	10.6	11.2		ppb v/v		106	70 - 130	0	25
trans-1,3-Dichloropropene	10.0	10.5		ppb v/v		105	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	10.7		ppb v/v		107	70 - 130	4	25
Ethylbenzene	10.6	10.3		ppb v/v		98	70 - 130	0	25
4-Ethyltoluene	10.0	10.2		ppb v/v		102	70 - 130	1	25
Hexachlorobutadiene	10.0	11.5		ppb v/v		115	70 - 130	1	25
2-Hexanone	10.0	10.7		ppb v/v		107	70 - 130	2	25
Methylene chloride	10.0	9.49		ppb v/v		95	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)	11.0	11.3		ppb v/v		103	70 - 130	1	25
Styrene	10.7	10.9		ppb v/v		102	70 - 130	0	25
1,1,2,2-Tetrachloroethane	10.8	10.8		ppb v/v		100	70 - 130	1	25
Tetrachloroethene	10.0	10.2		ppb v/v		102	70 - 130	1	25
Toluene	10.0	10.4		ppb v/v		104	70 - 130	0	25
1,2,4-Trichlorobenzene	10.0	11.1		ppb v/v		111	70 - 130	1	25
1,1,1-Trichloroethane	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,1,2-Trichloroethane	10.0	10.4		ppb v/v		104	70 - 130	0	25
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130	1	25
Trichlorofluoromethane	10.0	10.0		ppb v/v		100	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.36		ppb v/v		94	70 - 130	1	25
1,2,4-Trimethylbenzene	10.0	10.1		ppb v/v		101	70 - 130	0	25
1,3,5-Trimethylbenzene	10.7	10.6		ppb v/v		99	70 - 130	0	25
Vinyl acetate	10.8	10.7		ppb v/v		99	70 - 130	1	25
Vinyl chloride	10.0	10.4		ppb v/v		104	70 - 130	3	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2481/4
Matrix: Air
Analysis Batch: 2481

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
m,p-Xylene	20.0	21.5		ppb v/v		107	70 - 130	0	25
o-Xylene	10.8	10.5		ppb v/v		97	70 - 130	0	25
Naphthalene	10.0	10.6		ppb v/v		106	70 - 130	0	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	24	24.0		ug/m3		101	70 - 130	2	25
Benzene	32	32.6		ug/m3		102	70 - 130	0	25
Benzyl chloride	56	63.1		ug/m3		113	70 - 130	0	25
Bromodichloromethane	67	76.5		ug/m3		114	70 - 130	0	25
Bromoform	100	130		ug/m3		126	70 - 130	2	25
Bromomethane	39	39.6		ug/m3		102	70 - 130	3	25
2-Butanone (MEK)	31	23.9		ug/m3		76	70 - 130	1	25
Carbon disulfide	31	32.4		ug/m3		104	70 - 130	1	25
Carbon tetrachloride	63	70.1		ug/m3		111	70 - 130	0	25
Chlorobenzene	49	44.9		ug/m3		91	70 - 130	0	25
Dibromochloromethane	98	97.8		ug/m3		100	70 - 130	1	25
Chloroethane	26	28.8		ug/m3		109	70 - 130	2	25
Chloroform	49	47.9		ug/m3		98	70 - 130	1	25
Chloromethane	21	20.6		ug/m3		100	70 - 130	4	25
1,2-Dibromoethane (EDB)	77	80.1		ug/m3		104	70 - 130	1	25
1,2-Dichlorobenzene	64	63.4		ug/m3		99	70 - 130	0	25
1,3-Dichlorobenzene	65	63.3		ug/m3		98	70 - 130	1	25
1,4-Dichlorobenzene	60	62.8		ug/m3		105	70 - 130	1	25
Dichlorodifluoromethane	49	52.9		ug/m3		107	70 - 130	1	25
1,1-Dichloroethane	40	39.2		ug/m3		97	70 - 130	1	25
1,2-Dichloroethane	40	44.3		ug/m3		109	70 - 130	0	25
1,1-Dichloroethene	40	39.5		ug/m3		100	70 - 130	1	25
cis-1,2-Dichloroethene	40	37.8		ug/m3		95	70 - 130	2	25
trans-1,2-Dichloroethene	40	39.6		ug/m3		100	70 - 130	0	25
1,2-Dichloropropane	46	48.3		ug/m3		105	70 - 130	1	25
cis-1,3-Dichloropropene	48	50.8		ug/m3		106	70 - 130	0	25
trans-1,3-Dichloropropene	45	47.6		ug/m3		105	70 - 130	1	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	75.0		ug/m3		107	70 - 130	4	25
Ethylbenzene	46	44.9		ug/m3		98	70 - 130	0	25
4-Ethyltoluene	49	50.1		ug/m3		102	70 - 130	1	25
Hexachlorobutadiene	110	122		ug/m3		115	70 - 130	1	25
2-Hexanone	41	43.9		ug/m3		107	70 - 130	2	25
Methylene chloride	35	32.9		ug/m3		95	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)	45	46.3		ug/m3		103	70 - 130	1	25
Styrene	46	46.6		ug/m3		102	70 - 130	0	25
1,1,2,2-Tetrachloroethane	74	73.9		ug/m3		100	70 - 130	1	25
Tetrachloroethene	68	68.9		ug/m3		102	70 - 130	1	25
Toluene	38	39.1		ug/m3		104	70 - 130	0	25
1,2,4-Trichlorobenzene	74	82.3		ug/m3		111	70 - 130	1	25
1,1,1-Trichloroethane	55	54.9		ug/m3		101	70 - 130	1	25
1,1,2-Trichloroethane	55	56.7		ug/m3		104	70 - 130	0	25
Trichloroethene	54	54.5		ug/m3		101	70 - 130	1	25
Trichlorofluoromethane	56	56.4		ug/m3		100	70 - 130	2	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2481/4
Matrix: Air
Analysis Batch: 2481

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-Trichloro-1,2,2-trifluoroethane			77	71.7		ug/m3		94	70 - 130	1	25
1,2,4-Trimethylbenzene			49	49.9		ug/m3		101	70 - 130	0	25
1,3,5-Trimethylbenzene			53	52.0		ug/m3		99	70 - 130	0	25
Vinyl acetate			38	37.6		ug/m3		99	70 - 130	1	25
Vinyl chloride			26	26.7		ug/m3		104	70 - 130	3	25
m,p-Xylene			87	93.2		ug/m3		107	70 - 130	0	25
o-Xylene			47	45.6		ug/m3		97	70 - 130	0	25
Naphthalene			52	55.3		ug/m3		106	70 - 130	0	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 340-2486/5
Matrix: Air
Analysis Batch: 2486

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.80		ppb v/v			08/27/12 10:54	1
Benzene	ND		0.30		ppb v/v			08/27/12 10:54	1
Benzyl chloride	ND		0.80		ppb v/v			08/27/12 10:54	1
Bromodichloromethane	ND		0.30		ppb v/v			08/27/12 10:54	1
Bromoform	ND		0.40		ppb v/v			08/27/12 10:54	1
Bromomethane	ND		0.80		ppb v/v			08/27/12 10:54	1
2-Butanone (MEK)	ND		0.80		ppb v/v			08/27/12 10:54	1
Carbon disulfide	ND		0.80		ppb v/v			08/27/12 10:54	1
Carbon tetrachloride	ND		0.80		ppb v/v			08/27/12 10:54	1
Chlorobenzene	ND		0.30		ppb v/v			08/27/12 10:54	1
Dibromochloromethane	ND		0.40		ppb v/v			08/27/12 10:54	1
Chloroethane	ND		0.80		ppb v/v			08/27/12 10:54	1
Chloroform	ND		0.30		ppb v/v			08/27/12 10:54	1
Chloromethane	ND		0.80		ppb v/v			08/27/12 10:54	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			08/27/12 10:54	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			08/27/12 10:54	1
1,3-Dichlorobenzene	ND		0.40		ppb v/v			08/27/12 10:54	1
1,4-Dichlorobenzene	ND		0.40		ppb v/v			08/27/12 10:54	1
Dichlorodifluoromethane	ND		0.40		ppb v/v			08/27/12 10:54	1
1,1-Dichloroethane	ND		0.30		ppb v/v			08/27/12 10:54	1
1,2-Dichloroethane	ND		0.80		ppb v/v			08/27/12 10:54	1
1,1-Dichloroethene	ND		0.80		ppb v/v			08/27/12 10:54	1
cis-1,2-Dichloroethene	ND		0.40		ppb v/v			08/27/12 10:54	1
trans-1,2-Dichloroethene	ND		0.40		ppb v/v			08/27/12 10:54	1
1,2-Dichloropropane	ND		0.40		ppb v/v			08/27/12 10:54	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			08/27/12 10:54	1
trans-1,3-Dichloropropene	ND		0.40		ppb v/v			08/27/12 10:54	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40		ppb v/v			08/27/12 10:54	1
Ethylbenzene	ND		0.40		ppb v/v			08/27/12 10:54	1
4-Ethyltoluene	ND		0.40		ppb v/v			08/27/12 10:54	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-2486/5
Matrix: Air
Analysis Batch: 2486

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40		ppb v/v			08/27/12 10:54	1
2-Hexanone	ND		0.40		ppb v/v			08/27/12 10:54	1
Methylene chloride	ND		0.40		ppb v/v			08/27/12 10:54	1
4-Methyl-2-pentanone (MIBK)	ND		0.40		ppb v/v			08/27/12 10:54	1
Styrene	ND		0.40		ppb v/v			08/27/12 10:54	1
1,1,2,2-Tetrachloroethane	ND		0.40		ppb v/v			08/27/12 10:54	1
Tetrachloroethene	ND		0.40		ppb v/v			08/27/12 10:54	1
Toluene	ND		0.40		ppb v/v			08/27/12 10:54	1
1,2,4-Trichlorobenzene	ND		2.5		ppb v/v			08/27/12 10:54	1
1,1,1-Trichloroethane	ND		0.30		ppb v/v			08/27/12 10:54	1
1,1,2-Trichloroethane	ND		0.40		ppb v/v			08/27/12 10:54	1
Trichloroethene	ND		0.40		ppb v/v			08/27/12 10:54	1
Trichlorofluoromethane	ND		0.40		ppb v/v			08/27/12 10:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40		ppb v/v			08/27/12 10:54	1
1,2,4-Trimethylbenzene	ND		2.5		ppb v/v			08/27/12 10:54	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			08/27/12 10:54	1
Vinyl acetate	ND		0.80		ppb v/v			08/27/12 10:54	1
Vinyl chloride	ND		0.20		ppb v/v			08/27/12 10:54	1
m,p-Xylene	ND		0.80		ppb v/v			08/27/12 10:54	1
o-Xylene	ND		0.40		ppb v/v			08/27/12 10:54	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.9		ug/m3			08/27/12 10:54	1
Benzene	ND		0.96		ug/m3			08/27/12 10:54	1
Benzyl chloride	ND		4.1		ug/m3			08/27/12 10:54	1
Bromodichloromethane	ND		2.0		ug/m3			08/27/12 10:54	1
Bromoform	ND		4.1		ug/m3			08/27/12 10:54	1
Bromomethane	ND		3.1		ug/m3			08/27/12 10:54	1
2-Butanone (MEK)	ND		2.4		ug/m3			08/27/12 10:54	1
Carbon disulfide	ND		2.5		ug/m3			08/27/12 10:54	1
Carbon tetrachloride	ND		5.0		ug/m3			08/27/12 10:54	1
Chlorobenzene	ND		1.4		ug/m3			08/27/12 10:54	1
Dibromochloromethane	ND		3.4		ug/m3			08/27/12 10:54	1
Chloroethane	ND		2.1		ug/m3			08/27/12 10:54	1
Chloroform	ND		1.5		ug/m3			08/27/12 10:54	1
Chloromethane	ND		1.7		ug/m3			08/27/12 10:54	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			08/27/12 10:54	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			08/27/12 10:54	1
1,3-Dichlorobenzene	ND		2.4		ug/m3			08/27/12 10:54	1
1,4-Dichlorobenzene	ND		2.4		ug/m3			08/27/12 10:54	1
Dichlorodifluoromethane	ND		2.0		ug/m3			08/27/12 10:54	1
1,1-Dichloroethane	ND		1.2		ug/m3			08/27/12 10:54	1
1,2-Dichloroethane	ND		3.2		ug/m3			08/27/12 10:54	1
1,1-Dichloroethene	ND		3.2		ug/m3			08/27/12 10:54	1
cis-1,2-Dichloroethene	ND		1.6		ug/m3			08/27/12 10:54	1
trans-1,2-Dichloroethene	ND		1.6		ug/m3			08/27/12 10:54	1
1,2-Dichloropropane	ND		1.8		ug/m3			08/27/12 10:54	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			08/27/12 10:54	1
trans-1,3-Dichloropropene	ND		1.8		ug/m3			08/27/12 10:54	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.8		ug/m3			08/27/12 10:54	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 340-2486/5
Matrix: Air
Analysis Batch: 2486

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.7		ug/m3			08/27/12 10:54	1
4-Ethyltoluene	ND		2.0		ug/m3			08/27/12 10:54	1
Hexachlorobutadiene	ND		4.3		ug/m3			08/27/12 10:54	1
2-Hexanone	ND		1.6		ug/m3			08/27/12 10:54	1
Methylene chloride	ND		1.4		ug/m3			08/27/12 10:54	1
4-Methyl-2-pentanone (MIBK)	ND		1.6		ug/m3			08/27/12 10:54	1
Styrene	ND		1.7		ug/m3			08/27/12 10:54	1
1,1,2,2-Tetrachloroethane	ND		2.7		ug/m3			08/27/12 10:54	1
Tetrachloroethene	ND		2.7		ug/m3			08/27/12 10:54	1
Toluene	ND		1.5		ug/m3			08/27/12 10:54	1
1,2,4-Trichlorobenzene	ND		19		ug/m3			08/27/12 10:54	1
1,1,1-Trichloroethane	ND		1.6		ug/m3			08/27/12 10:54	1
1,1,2-Trichloroethane	ND		2.2		ug/m3			08/27/12 10:54	1
Trichloroethene	ND		2.1		ug/m3			08/27/12 10:54	1
Trichlorofluoromethane	ND		2.2		ug/m3			08/27/12 10:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1		ug/m3			08/27/12 10:54	1
1,2,4-Trimethylbenzene	ND		12		ug/m3			08/27/12 10:54	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			08/27/12 10:54	1
Vinyl acetate	ND		2.8		ug/m3			08/27/12 10:54	1
Vinyl chloride	ND		0.51		ug/m3			08/27/12 10:54	1
m,p-Xylene	ND		3.5		ug/m3			08/27/12 10:54	1
o-Xylene	ND		1.7		ug/m3			08/27/12 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/27/12 10:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/27/12 10:54*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/12 10:54*	*1*

Lab Sample ID: LCS 340-2486/3
Matrix: Air
Analysis Batch: 2486

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10.0	10.4		ppb v/v		104	70 - 130
Benzene	10.0	10.1		ppb v/v		101	70 - 130
Benzyl chloride	10.8	12.3		ppb v/v		114	70 - 130
Bromodichloromethane	10.0	11.5		ppb v/v		115	70 - 130
Bromoform	10.0	12.7		ppb v/v		127	70 - 130
Bromomethane	10.0	10.8		ppb v/v		108	70 - 130
2-Butanone (MEK)	10.6	8.00		ppb v/v		75	70 - 130
Carbon disulfide	10.0	10.5		ppb v/v		105	70 - 130
Carbon tetrachloride	10.0	11.0		ppb v/v		110	70 - 130
Chlorobenzene	10.7	9.68		ppb v/v		90	70 - 130
Dibromochloromethane	11.5	11.5		ppb v/v		100	70 - 130
Chloroethane	10.0	11.3		ppb v/v		113	70 - 130
Chloroform	10.0	9.91		ppb v/v		99	70 - 130
Chloromethane	10.0	10.9		ppb v/v		109	70 - 130
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130
1,2-Dichlorobenzene	10.7	10.6		ppb v/v		99	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-2486/3
Matrix: Air
Analysis Batch: 2486

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.8	10.6		ppb v/v		98	70 - 130
1,4-Dichlorobenzene	10.0	10.5		ppb v/v		105	70 - 130
Dichlorodifluoromethane	10.0	11.0		ppb v/v		110	70 - 130
1,1-Dichloroethane	10.0	9.74		ppb v/v		97	70 - 130
1,2-Dichloroethane	10.0	10.9		ppb v/v		109	70 - 130
1,1-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130
cis-1,2-Dichloroethene	10.0	9.58		ppb v/v		96	70 - 130
trans-1,2-Dichloroethene	10.0	10.1		ppb v/v		101	70 - 130
1,2-Dichloropropane	10.0	10.3		ppb v/v		103	70 - 130
cis-1,3-Dichloropropene	10.6	11.1		ppb v/v		104	70 - 130
trans-1,3-Dichloropropene	10.0	10.4		ppb v/v		104	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.6		ppb v/v		116	70 - 130
Ethylbenzene	10.6	10.2		ppb v/v		97	70 - 130
4-Ethyltoluene	10.0	10.5		ppb v/v		105	70 - 130
Hexachlorobutadiene	10.0	10.9		ppb v/v		109	70 - 130
2-Hexanone	10.0	10.5		ppb v/v		105	70 - 130
Methylene chloride	10.0	9.67		ppb v/v		97	70 - 130
4-Methyl-2-pentanone (MIBK)	11.0	11.2		ppb v/v		102	70 - 130
Styrene	10.7	11.0		ppb v/v		103	70 - 130
1,1,2,2-Tetrachloroethane	10.8	10.8		ppb v/v		100	70 - 130
Tetrachloroethene	10.0	10.0		ppb v/v		100	70 - 130
Toluene	10.0	10.4		ppb v/v		104	70 - 130
1,2,4-Trichlorobenzene	10.0	10.5		ppb v/v		105	70 - 130
1,1,1-Trichloroethane	10.0	10.1		ppb v/v		101	70 - 130
1,1,2-Trichloroethane	10.0	10.4		ppb v/v		104	70 - 130
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130
Trichlorofluoromethane	10.0	10.3		ppb v/v		103	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.43		ppb v/v		94	70 - 130
1,2,4-Trimethylbenzene	10.0	10.3		ppb v/v		103	70 - 130
1,3,5-Trimethylbenzene	10.7	10.5		ppb v/v		98	70 - 130
Vinyl acetate	10.8	10.8		ppb v/v		100	70 - 130
Vinyl chloride	10.0	11.2		ppb v/v		112	70 - 130
m,p-Xylene	20.0	21.6		ppb v/v		108	70 - 130
o-Xylene	10.8	10.5		ppb v/v		97	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	24.6		ug/m3		104	70 - 130
Benzene	32	32.4		ug/m3		101	70 - 130
Benzyl chloride	56	63.9		ug/m3		114	70 - 130
Bromodichloromethane	67	77.1		ug/m3		115	70 - 130
Bromoform	100	131		ug/m3		127	70 - 130
Bromomethane	39	41.9		ug/m3		108	70 - 130
2-Butanone (MEK)	31	23.6		ug/m3		75	70 - 130
Carbon disulfide	31	32.7		ug/m3		105	70 - 130
Carbon tetrachloride	63	69.4		ug/m3		110	70 - 130
Chlorobenzene	49	44.5		ug/m3		90	70 - 130
Dibromochloromethane	98	98.4		ug/m3		100	70 - 130
Chloroethane	26	29.7		ug/m3		113	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 340-2486/3
Matrix: Air
Analysis Batch: 2486

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	49	48.4		ug/m3		99	70 - 130
Chloromethane	21	22.6		ug/m3		109	70 - 130
1,2-Dibromoethane (EDB)	77	79.5		ug/m3		103	70 - 130
1,2-Dichlorobenzene	64	63.9		ug/m3		99	70 - 130
1,3-Dichlorobenzene	65	63.7		ug/m3		98	70 - 130
1,4-Dichlorobenzene	60	62.9		ug/m3		105	70 - 130
Dichlorodifluoromethane	49	54.5		ug/m3		110	70 - 130
1,1-Dichloroethane	40	39.4		ug/m3		97	70 - 130
1,2-Dichloroethane	40	44.1		ug/m3		109	70 - 130
1,1-Dichloroethene	40	39.9		ug/m3		101	70 - 130
cis-1,2-Dichloroethene	40	38.0		ug/m3		96	70 - 130
trans-1,2-Dichloroethene	40	39.9		ug/m3		101	70 - 130
1,2-Dichloropropane	46	47.4		ug/m3		103	70 - 130
cis-1,3-Dichloropropene	48	50.2		ug/m3		104	70 - 130
trans-1,3-Dichloropropene	45	47.2		ug/m3		104	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	80.9		ug/m3		116	70 - 130
Ethylbenzene	46	44.5		ug/m3		97	70 - 130
4-Ethyltoluene	49	51.4		ug/m3		105	70 - 130
Hexachlorobutadiene	110	116		ug/m3		109	70 - 130
2-Hexanone	41	42.9		ug/m3		105	70 - 130
Methylene chloride	35	33.6		ug/m3		97	70 - 130
4-Methyl-2-pentanone (MIBK)	45	45.9		ug/m3		102	70 - 130
Styrene	46	46.7		ug/m3		103	70 - 130
1,1,2,2-Tetrachloroethane	74	74.3		ug/m3		100	70 - 130
Tetrachloroethene	68	67.9		ug/m3		100	70 - 130
Toluene	38	39.0		ug/m3		104	70 - 130
1,2,4-Trichlorobenzene	74	77.7		ug/m3		105	70 - 130
1,1,1-Trichloroethane	55	55.0		ug/m3		101	70 - 130
1,1,2-Trichloroethane	55	56.5		ug/m3		104	70 - 130
Trichloroethene	54	54.2		ug/m3		101	70 - 130
Trichlorofluoromethane	56	58.1		ug/m3		103	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	77	72.2		ug/m3		94	70 - 130
1,2,4-Trimethylbenzene	49	50.6		ug/m3		103	70 - 130
1,3,5-Trimethylbenzene	53	51.6		ug/m3		98	70 - 130
Vinyl acetate	38	38.0		ug/m3		100	70 - 130
Vinyl chloride	26	28.5		ug/m3		112	70 - 130
m,p-Xylene	87	93.6		ug/m3		108	70 - 130
o-Xylene	47	45.7		ug/m3		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2486/4
Matrix: Air
Analysis Batch: 2486

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	10.0	10.2		ppb v/v		102	70 - 130	2	25
Benzene	10.0	10.3		ppb v/v		103	70 - 130	1	25
Benzyl chloride	10.8	12.2		ppb v/v		113	70 - 130	1	25
Bromodichloromethane	10.0	11.6		ppb v/v		116	70 - 130	1	25
Bromoform	10.0	12.6		ppb v/v		126	70 - 130	0	25
Bromomethane	10.0	10.6		ppb v/v		106	70 - 130	2	25
2-Butanone (MEK)	10.6	8.09		ppb v/v		76	70 - 130	1	25
Carbon disulfide	10.0	10.3		ppb v/v		103	70 - 130	2	25
Carbon tetrachloride	10.0	11.3		ppb v/v		113	70 - 130	2	25
Chlorobenzene	10.7	9.70		ppb v/v		91	70 - 130	0	25
Dibromochloromethane	11.5	11.5		ppb v/v		100	70 - 130	0	25
Chloroethane	10.0	11.0		ppb v/v		110	70 - 130	2	25
Chloroform	10.0	9.81		ppb v/v		98	70 - 130	1	25
Chloromethane	10.0	10.5		ppb v/v		105	70 - 130	4	25
1,2-Dibromoethane (EDB)	10.0	10.3		ppb v/v		103	70 - 130	0	25
1,2-Dichlorobenzene	10.7	10.5		ppb v/v		98	70 - 130	1	25
1,3-Dichlorobenzene	10.8	10.5		ppb v/v		97	70 - 130	1	25
1,4-Dichlorobenzene	10.0	10.4		ppb v/v		104	70 - 130	1	25
Dichlorodifluoromethane	10.0	10.8		ppb v/v		108	70 - 130	2	25
1,1-Dichloroethane	10.0	9.70		ppb v/v		97	70 - 130	0	25
1,2-Dichloroethane	10.0	11.0		ppb v/v		110	70 - 130	1	25
1,1-Dichloroethene	10.0	9.99		ppb v/v		100	70 - 130	1	25
cis-1,2-Dichloroethene	10.0	9.48		ppb v/v		95	70 - 130	1	25
trans-1,2-Dichloroethene	10.0	9.97		ppb v/v		100	70 - 130	1	25
1,2-Dichloropropane	10.0	10.4		ppb v/v		104	70 - 130	2	25
cis-1,3-Dichloropropene	10.6	11.2		ppb v/v		106	70 - 130	2	25
trans-1,3-Dichloropropene	10.0	10.4		ppb v/v		104	70 - 130	0	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	11.2		ppb v/v		112	70 - 130	4	25
Ethylbenzene	10.6	10.3		ppb v/v		97	70 - 130	0	25
4-Ethyltoluene	10.0	10.2		ppb v/v		102	70 - 130	3	25
Hexachlorobutadiene	10.0	11.2		ppb v/v		112	70 - 130	2	25
2-Hexanone	10.0	10.6		ppb v/v		106	70 - 130	1	25
Methylene chloride	10.0	9.54		ppb v/v		95	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)	11.0	11.3		ppb v/v		103	70 - 130	1	25
Styrene	10.7	10.9		ppb v/v		102	70 - 130	1	25
1,1,2,2-Tetrachloroethane	10.8	10.8		ppb v/v		100	70 - 130	1	25
Tetrachloroethene	10.0	10.0		ppb v/v		100	70 - 130	0	25
Toluene	10.0	10.4		ppb v/v		104	70 - 130	1	25
1,2,4-Trichlorobenzene	10.0	10.8		ppb v/v		108	70 - 130	3	25
1,1,1-Trichloroethane	10.0	10.0		ppb v/v		100	70 - 130	0	25
1,1,2-Trichloroethane	10.0	10.4		ppb v/v		104	70 - 130	0	25
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130	0	25
Trichlorofluoromethane	10.0	10.1		ppb v/v		101	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.34		ppb v/v		93	70 - 130	1	25
1,2,4-Trimethylbenzene	10.0	10.1		ppb v/v		101	70 - 130	1	25
1,3,5-Trimethylbenzene	10.7	10.6		ppb v/v		99	70 - 130	1	25
Vinyl acetate	10.8	10.8		ppb v/v		100	70 - 130	0	25
Vinyl chloride	10.0	10.7		ppb v/v		107	70 - 130	4	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2486/4
Matrix: Air
Analysis Batch: 2486

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
m,p-Xylene	20.0	21.5		ppb v/v		107	70 - 130	0	25
o-Xylene	10.8	10.5		ppb v/v		97	70 - 130	0	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	24	24.2		ug/m3		102	70 - 130	2	25
Benzene	32	32.8		ug/m3		103	70 - 130	1	25
Benzyl chloride	56	63.2		ug/m3		113	70 - 130	1	25
Bromodichloromethane	67	77.8		ug/m3		116	70 - 130	1	25
Bromoform	100	131		ug/m3		126	70 - 130	0	25
Bromomethane	39	41.3		ug/m3		106	70 - 130	2	25
2-Butanone (MEK)	31	23.9		ug/m3		76	70 - 130	1	25
Carbon disulfide	31	32.2		ug/m3		103	70 - 130	2	25
Carbon tetrachloride	63	70.8		ug/m3		113	70 - 130	2	25
Chlorobenzene	49	44.5		ug/m3		91	70 - 130	0	25
Dibromochloromethane	98	98.0		ug/m3		100	70 - 130	0	25
Chloroethane	26	29.0		ug/m3		110	70 - 130	2	25
Chloroform	49	47.9		ug/m3		98	70 - 130	1	25
Chloromethane	21	21.6		ug/m3		105	70 - 130	4	25
1,2-Dibromoethane (EDB)	77	79.5		ug/m3		103	70 - 130	0	25
1,2-Dichlorobenzene	64	63.2		ug/m3		98	70 - 130	1	25
1,3-Dichlorobenzene	65	63.0		ug/m3		97	70 - 130	1	25
1,4-Dichlorobenzene	60	62.3		ug/m3		104	70 - 130	1	25
Dichlorodifluoromethane	49	53.3		ug/m3		108	70 - 130	2	25
1,1-Dichloroethane	40	39.3		ug/m3		97	70 - 130	0	25
1,2-Dichloroethane	40	44.4		ug/m3		110	70 - 130	1	25
1,1-Dichloroethene	40	39.6		ug/m3		100	70 - 130	1	25
cis-1,2-Dichloroethene	40	37.6		ug/m3		95	70 - 130	1	25
trans-1,2-Dichloroethene	40	39.5		ug/m3		100	70 - 130	1	25
1,2-Dichloropropane	46	48.2		ug/m3		104	70 - 130	2	25
cis-1,3-Dichloropropene	48	51.0		ug/m3		106	70 - 130	2	25
trans-1,3-Dichloropropene	45	47.4		ug/m3		104	70 - 130	0	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	78.1		ug/m3		112	70 - 130	4	25
Ethylbenzene	46	44.5		ug/m3		97	70 - 130	0	25
4-Ethyltoluene	49	49.9		ug/m3		102	70 - 130	3	25
Hexachlorobutadiene	110	119		ug/m3		112	70 - 130	2	25
2-Hexanone	41	43.4		ug/m3		106	70 - 130	1	25
Methylene chloride	35	33.1		ug/m3		95	70 - 130	1	25
4-Methyl-2-pentanone (MIBK)	45	46.5		ug/m3		103	70 - 130	1	25
Styrene	46	46.3		ug/m3		102	70 - 130	1	25
1,1,2,2-Tetrachloroethane	74	73.9		ug/m3		100	70 - 130	1	25
Tetrachloroethene	68	68.0		ug/m3		100	70 - 130	0	25
Toluene	38	39.3		ug/m3		104	70 - 130	1	25
1,2,4-Trichlorobenzene	74	80.2		ug/m3		108	70 - 130	3	25
1,1,1-Trichloroethane	55	54.8		ug/m3		100	70 - 130	0	25
1,1,2-Trichloroethane	55	56.6		ug/m3		104	70 - 130	0	25
Trichloroethene	54	54.4		ug/m3		101	70 - 130	0	25
Trichlorofluoromethane	56	56.9		ug/m3		101	70 - 130	2	25
1,1,2-Trichloro-1,2,2-trifluoroethane	77	71.6		ug/m3		93	70 - 130	1	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 340-2486/4
Matrix: Air
Analysis Batch: 2486

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
1,2,4-Trimethylbenzene			49	49.9		ug/m3		101	70 - 130	1	25
1,3,5-Trimethylbenzene			53	52.0		ug/m3		99	70 - 130	1	25
Vinyl acetate			38	37.9		ug/m3		100	70 - 130	0	25
Vinyl chloride			26	27.4		ug/m3		107	70 - 130	4	25
m,p-Xylene			87	93.3		ug/m3		107	70 - 130	0	25
o-Xylene			47	45.4		ug/m3		97	70 - 130	0	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

GC VOA

Analysis Batch: 2456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-3569-1	SG-7	Total/NA	Air	D1946	
340-3569-2	SG-6	Total/NA	Air	D1946	
340-3569-3	SG-5	Total/NA	Air	D1946	
340-3569-4	SG-1	Total/NA	Air	D1946	
340-3569-5	SG-2	Total/NA	Air	D1946	
340-3569-6	SG-3	Total/NA	Air	D1946	
340-3569-7	SG-4	Total/NA	Air	D1946	
LCS 340-2456/4	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-2456/6	Lab Control Sample	Total/NA	Air	D1946	
LCS 340-2456/9	Lab Control Sample	Total/NA	Air	D1946	
LCSD 340-2456/10	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-2456/5	Lab Control Sample Dup	Total/NA	Air	D1946	
LCSD 340-2456/7	Lab Control Sample Dup	Total/NA	Air	D1946	
MB 340-2456/11	Method Blank	Total/NA	Air	D1946	
MB 340-2456/8	Method Blank	Total/NA	Air	D1946	

Air - GC/MS VOA

Analysis Batch: 2477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-3569-1	SG-7	Total/NA	Air	TO-15	
340-3569-4	SG-1	Total/NA	Air	TO-15	
340-3569-7	SG-4	Total/NA	Air	TO-15	
LCS 340-2477/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-2477/5	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-2477/6	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 2481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-3569-2	SG-6	Total/NA	Air	TO-15	
340-3569-3	SG-5	Total/NA	Air	TO-15	
340-3569-5	SG-2	Total/NA	Air	TO-15	
LCS 340-2481/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-2481/4	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-2481/5	Method Blank	Total/NA	Air	TO-15	

Analysis Batch: 2486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
340-3569-6	SG-3	Total/NA	Air	TO-15	
LCS 340-2486/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 340-2486/4	Lab Control Sample Dup	Total/NA	Air	TO-15	
MB 340-2486/5	Method Blank	Total/NA	Air	TO-15	

Lab Chronicle

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-7
Lab Sample ID: 340-3569-1
Date Collected: 08/20/12 10:51
Matrix: Air
Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.22	2456	08/23/12 11:02	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	2477	08/25/12 16:12	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SG-6
Lab Sample ID: 340-3569-2
Date Collected: 08/20/12 10:30
Matrix: Air
Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.2	2456	08/23/12 11:21	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2.53	2481	08/26/12 13:35	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SG-5
Lab Sample ID: 340-3569-3
Date Collected: 08/20/12 11:27
Matrix: Air
Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.96	2456	08/23/12 11:41	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1.72	2481	08/26/12 20:29	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SG-1
Lab Sample ID: 340-3569-4
Date Collected: 08/20/12 12:22
Matrix: Air
Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.35	2456	08/23/12 12:01	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	2477	08/25/12 18:36	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SG-2
Lab Sample ID: 340-3569-5
Date Collected: 08/20/12 12:55
Matrix: Air
Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.29	2456	08/23/12 12:31	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2.9	2481	08/27/12 00:11	DLK	TAL LA
	Instrument ID: MSG							

Lab Chronicle

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Client Sample ID: SG-3

Lab Sample ID: 340-3569-6

Date Collected: 08/20/12 13:16

Matrix: Air

Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		2.3	2456	08/23/12 12:57	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		2.22	2486	08/27/12 13:05	DLK	TAL LA
	Instrument ID: MSG							

Client Sample ID: SG-4

Lab Sample ID: 340-3569-7

Date Collected: 08/20/12 13:43

Matrix: Air

Date Received: 08/21/12 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D1946		1.74	2456	08/23/12 14:25	EI	TAL LA
	Instrument ID: GC8							
Total/NA	Analysis	TO-15		1	2477	08/25/12 20:57	DLK	TAL LA
	Instrument ID: MSG							

Laboratory References:

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

Certification Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Laboratory: TestAmerica Costa Mesa

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0727	02-09-13
Florida	NELAC	4	E87652	06-30-13
L-A-B	DoD ELAP		L2273	11-09-13
Louisiana	NELAC	6	01948	06-30-13
New York	NELAC	2	11851	04-01-13
Oregon	NELAC	10	CA200013	07-19-13
Utah	NELAC	8	CA000032012-1	06-30-13
Washington	State Program	10	C579	11-29-12

Method Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Method	Method Description	Protocol	Laboratory
D1946	Fixed Gases in Air (GC)	ASTM	TAL LA
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL LA

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

TAL LA = TestAmerica Costa Mesa, 3585 Cadillac Ave, Suite A, Costa Mesa, CA 92626, TEL (714)258-8610

Sample Summary

Client: Terraphase Engineering Inc
Project/Site: Dublin Parcel 16A

TestAmerica Job ID: 340-3569-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
340-3569-1	SG-7	Air	08/20/12 10:51	08/21/12 10:30
340-3569-2	SG-6	Air	08/20/12 10:30	08/21/12 10:30
340-3569-3	SG-5	Air	08/20/12 11:27	08/21/12 10:30
340-3569-4	SG-1	Air	08/20/12 12:22	08/21/12 10:30
340-3569-5	SG-2	Air	08/20/12 12:55	08/21/12 10:30
340-3569-6	SG-3	Air	08/20/12 13:16	08/21/12 10:30
340-3569-7	SG-4	Air	08/20/12 13:43	08/21/12 10:30

TestAmerica
3585 Cadillac Ave., Suite A
Costa Mesa, CA 92626
Phone 714-258-8610 Fax 714-258-0921

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

340-3569

* 37

Client Contact Information	Project Manager: Wendy Bellah	1 of 2 COCs
Company: Terraphase	Phone: 510-645-1850	Samples Collected By: Kara Quan-Montgomery & Emily Molen
Address: 1404 Franklin St. Ste 600	Email: wendy.bellah@terraphase.com	
City/State/Zip: Oakland CA 94612	Site Contact: Kara Quan-Montgomery	
Phone: 510-645-1850	LAB Contact:	
FAX:	Analysis Turnaround Time	
Project Name: Dublin Parcel 11eA	~~Standard~~ (Specify)	
Site:	(Rush) (Specify) 5 days	
PO.# 0002.006.004		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 VOCs	TO-14A	TO-3	EPA 3C	EPA 25C	ASTM D-1946 Helium	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SG-7	8/20/12	1051	1058	30	5	HF-28	3400[illegible]32[illegible]	✓					✓	✓				✓		
SG-6	8/20/12	1030	1037	28	5	HF018	3400[illegible]616	✓					✓	✓				✓		
SG-5	8/20/12	1127	1200	30	11	AF153	3400 0911	✓					✓					✓		
SG-1	8/20/12	1222	1228	28	5	HF251	3400 1034	✓					✓					✓		
SG-2	8/20/12	1255	1302	30	5	HF002	3400 0691	✓					✓					✓		
SG-3	8/20/12	1316	1323	30	5	HF028	3400 0640	✓					✓					✓		

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

Special Instructions/QC Requirements & Comments:
Other = Analyze Samples for naphthalene & methane in addition to VOCs.

Samples Shipped by: E. Nosco E Molen	Date/Time: 8/20/12 1430	Samples Received by: 8/21/12 10:30
Samples Relinquished by:	Date/Time:	Received by:
Relinquished by:	Date/Time:	Received by:

Lab Use Only: Shipper Name: Opened by: Condition:

TAL-8604-340(0312)

8/28/2012

TestAmerica
3585 Cadillac Ave., Suite A
Costa Mesa, CA 92626
Phone 714-258-8610 Fax 714-258-0921

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

340-3569

2 of 2 COCs

Client Contact Information	Project Manager: Wendy Bellah	Samples Collected By:
Company: Terraphase	Phone: 510-645-1850	
Address: 1404 Franklin St. Ste 600	Email: wendy.bellah@terraphase.com	
City/State/Zip: Oakland CA 94612	Site Contact: Kara Sloan Montgomery	
Phone: 510-645-1850	LAB Contact:	
FAX:	Analysis Turnaround Time	
Project Name: Dublin Parcel 16A	Standard (Specify)	
Site:	Rush (Specify) 5 days	
PO# 0002.006.004		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 VOCs	TO-14A	TO-3	EPA 3C	EPA 25C	ASTM D-1946 Helium	Other (Please specify in notes section)	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SG-4	8/20/12	1304 BA	1356	30	5	HFC178	3400703516	✓					✓				✓		

Temperature (Fahrenheit)			
	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)			
	Interior	Ambient	
Start			
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by: E. Masen	Date/Time: 8/20 1430	Samples Received by:	Date/Time: 8/21/12 10:30
Samples Relinquished by:	Date/Time:	Received by:	
Relinquished by:	Date/Time:	Received by:	

Lab Use Only: Shipper Name: Opened by: Condition:

TAL-9604-340(0312)

8/28/2012

Login Sample Receipt Checklist

Client: Terraphase Engineering Inc

Job Number: 340-3569-1

Login Number: 3569

List Source: TestAmerica Costa Mesa

List Number: 1

Creator: Morales, Sergio

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

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 340003326

DATE CLEANED: 340- 3409

CLIENT SAMPLE #: SG-7

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF-28

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	8/14/12	
INITIAL FIELD VACUUM	1051	30"	8/20/12	KQM
FINAL FIELD READING	1058	5"	8/20/12	KQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	12.53	8/22/12	
FINAL PRESSURE (PSIA)	27.81	8/22/12	

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 340006/6

DATE CLEANED: 340-3409

CLIENT SAMPLE #: SG-6

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF018

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/14/12	
INITIAL FIELD VACUUM	1030	28	8/20/12	KQM
FINAL FIELD READING	1037	5	8/20/12	KQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg/ PSIA (circle unit used))	11.99	8/22/12	
FINAL PRESSURE (PSIA)	26.39	8/22/12	

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 3400091 1

DATE CLEANED: 3410-3409

CLIENT SAMPLE #: SG-5

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF153

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/14/12	
INITIAL FIELD VACUUM	1127	30"	8/20/12	KQM
FINAL FIELD READING KQM 1200	1150	11"	8/20/12	KQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	13.18	8/22/12	
FINAL PRESSURE (PSIA)	25.81	8/22/12	

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 34001074

DATE CLEANED: 340-3409

CLIENT SAMPLE #: SG-1

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF251

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials: [signature]

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	8/14/12	[signature]
INITIAL FIELD VACUUM	1222	28"	8/20/12	KQM
FINAL FIELD READING	1228	5"	8/20/12	KQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA) (circle unit used))	11.34	8/22/12	[signature]
FINAL PRESSURE (PSIA)	26.68	8/22/12	[signature]

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 3400064 1

DATE CLEANED: 340-3409

CLIENT SAMPLE #: SG-2

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF032

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	8/14/12	
INITIAL FIELD VACUUM	1255	30"	8/20/12	ACQM
FINAL FIELD READING	1302	5"	8/20/12	ACQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA) (circle unit used))	12.03	8/22/12	
FINAL PRESSURE (PSIA)	27.61	8/22/12	

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 340006Q10

DATE CLEANED: 340 - 3409

CLIENT SAMPLE #: SG-3

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF028

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials: [signature]

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	8/14/12	[signature]
INITIAL FIELD VACUUM	1316	30"	8/20/12	4CQM
FINAL FIELD READING	1324 4CQM 1323	5"	8/20/12	4CQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	11.91	8/22/12	[signature]
FINAL PRESSURE (PSIA)	27.40	8/22/12	[signature]

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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TestAmerica

CANISTER FIELD DATA RECORD

CLIENT: TERRAPHASE

CANISTER SERIAL #: 3400 1036

DATE CLEANED: 340- 3409

CLIENT SAMPLE #: SG-4

SITE LOCATION: Dublin Parcel 16A

VFR ID: HF078

Duration of comp. : — Hrs. / mins.

Flow setting: 150 ml/min

Initials:

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/14/12	
INITIAL FIELD VACUUM	1343	30"	8/20/12	AKQM
FINAL FIELD READING	1356	5"	8/20/12	AKQM

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (Inches Hg / PSIA (circle unit used))	14.57	8/22/12	
FINAL PRESSURE (PSIA)	25.35	8/22/12	

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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CANISTER QC CERTIFICATION

TestAmerica

Certification Type: TO-15

Date Cleaned/Batch: LC081128 340-3409

Date of QC: 08-14-12

Data File Number: LW3083F(MS6)

CANISTER ID NUMBERS

*34000930	34000640
0616	1036
0911	0992
0326	1033
1074	0650
0641	1000

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

Reviewed By:

Date: 08-14-12

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-3409-1

SDG No.:

Client Sample ID: 34000930 Lab Sample ID: 340-3409-1

Matrix: Air Lab File ID: MB0813F.d

Analysis Method: TO-15 Date Collected: 08/11/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 08/14/2012 07:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 2369 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		0.80	0.30
107-02-8	Acrolein	ND		4.0	2.0
107-13-1	Acrylonitrile	ND		2.0	0.50
107-05-1	Allyl chloride	ND		0.50	0.25
71-43-2	Benzene	ND		0.30	0.15
100-44-7	Benzyl chloride	ND		0.80	0.25
75-27-4	Bromodichloromethane	ND		0.30	0.15
75-25-2	Bromoform	ND		0.40	0.20
74-83-9	Bromomethane	ND		0.80	0.20
106-99-0	1,3-Butadiene	ND	*	0.80	0.40
106-97-8	n-Butane	ND	*	0.50	0.25
78-93-3	2-Butanone (MEK)	ND		0.80	0.40
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.80
104-51-8	n-Butylbenzene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
98-06-6	tert-Butylbenzene	ND		0.80	0.40
75-15-0	Carbon disulfide	ND		0.80	0.20
56-23-5	Carbon tetrachloride	ND		0.80	0.25
75-00-3	Chloroethane	ND		0.80	0.20
108-90-7	Chlorobenzene	ND		0.30	0.10
75-45-6	Chlorodifluoromethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.30	0.10
74-87-3	Chloromethane	ND	*	0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.50	0.25
110-82-7	Cyclohexane	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.40	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.20
74-95-3	Dibromomethane	ND		0.40	0.20
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.20
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.15
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.15
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.15
107-06-2	1,2-Dichloroethane	ND		0.80	0.30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-3409-1

SDG No.:

Client Sample ID: 34000930 Lab Sample ID: 340-3409-1

Matrix: Air Lab File ID: MB0813F.d

Analysis Method: TO-15 Date Collected: 08/11/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 08/14/2012 07:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 2369 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.20
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.20
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.20
78-87-5	1,2-Dichloropropane	ND		0.40	0.20
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.20
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.20
123-91-1	1,4-Dioxane	ND		0.80	0.40
141-78-6	Ethyl acetate	ND		0.30	0.15
100-41-4	Ethylbenzene	ND		0.40	0.15
622-96-8	4-Ethyltoluene	ND		0.40	0.20
142-82-5	n-Heptane	ND		1.0	0.30
87-68-3	Hexachlorobutadiene	ND	*	0.40	0.20
110-54-3	n-Hexane	ND		1.0	0.40
591-78-6	2-Hexanone	ND		0.40	0.25
98-82-8	Isopropylbenzene	ND		0.80	0.25
99-87-6	4-Isopropyltoluene	ND		0.80	0.25
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.30
80-62-6	Methyl methacrylate	ND		0.40	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.20
75-09-2	Methylene chloride	ND		0.40	0.20
98-83-9	alpha-Methylstyrene	ND		0.40	0.15
91-20-3	Naphthalene	ND	*	2.0	0.80
111-65-9	n-Octane	ND		0.40	0.15
109-66-0	n-Pentane	ND		1.0	0.30
115-07-1	Propylene	ND		1.0	0.50
103-65-1	n-Propylbenzene	ND		0.50	0.20
100-42-5	Styrene	ND		0.40	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.10
127-18-4	Tetrachloroethene	ND		0.40	0.20
109-99-9	Tetrahydrofuran	ND		2.0	0.50
108-88-3	Toluene	ND		0.40	0.20
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	*	2.5	1.0
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.15
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Costa Mesa Job No.: 340-3409-1

SDG No.:

Client Sample ID: 34000930 Lab Sample ID: 340-3409-1

Matrix: Air Lab File ID: MB0813F.d

Analysis Method: TO-15 Date Collected: 08/11/2012 00:00

Sample wt/vol: 250(mL) Date Analyzed: 08/14/2012 07:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: See SOP ID:

% Moisture: Level: (low/med) Low

Analysis Batch No.: 2369 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.20
75-69-4	Trichlorofluoromethane	ND		0.40	0.15
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.20
95-63-6	1,2,4-Trimethylbenzene	ND		2.5	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.25
540-84-1	2,2,4-Trimethylpentane	ND		0.50	0.20
108-05-4	Vinyl acetate	ND		0.80	0.20
593-60-2	Vinyl bromide	ND		0.40	0.20
75-01-4	Vinyl chloride	ND		0.20	0.10
179601-23-1	m,p-Xylene	ND		0.80	0.20
95-47-6	o-Xylene	ND		0.40	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		70-130
2037-26-5	Toluene-d8 (Surr)	91		70-130

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Lachrom\ChromData\MSG\20120813-1663.b\MB0813F.d		
Lims ID:	340-3409-A-1	Client ID:	34000930
Inject. Date:	14-Aug-2012 07:50:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	340-3409-A-1		
Misc. Info.:	340-0001663-033		
Operator:	DLK	Instrument ID:	MSG
Vol. Injected:	1.0000	ALS Bottle#:	15
Lims Batch ID:	2369	Lims Sample ID:	33
Detector:	MS SCAN		
Method:	\\Lachrom\ChromData\MSG\20120813-1663.b\TO-15_MSG.m		
Method Label:	TO-15/TO-14A		
Last Update:	14-Aug-2012 09:04:05	Calib Date:	24-Jul-2012 16:10:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Lachrom\ChromData\MSG\20120724-1547.b\IC07248.d		
Limit Group:	TO-15-TO-15_MOD_ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-12		
First Level Reviewer: kammererd		Date:	14-Aug-2012 09:04:05

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ppb v/v	Flags
* 57 Chlorobromomethane (IS)	49	11.354	11.354	0.0	94	45429	4.00	
$ 64 1,2-Dichloroethane-d4 (Surr)	65	12.154	12.154	0.0	96	38817	3.54	
* 70 1,4-Difluorobenzene	114	12.743	12.750	-0.007	95	101189	4.00	
$ 80 Toluene-d8 (Surr)	98	14.877	14.883	-0.006	98	99934	3.66	
* 89 Chlorobenzene-d5 (IS)	117	16.910	16.917	-0.007	87	88175	4.00	
$ 100 4-Bromofluorobenzene (Surr)	95	18.541	18.547	-0.006	89	64917	3.62	

Report Date: 14-Aug-2012 09:04:06 Chrom Revision: 2.0 15-Jul-2012 07:31:48

Data File: \\Lachrom\ChromData\MSG\20120813-1663.b\MB0813F.d

Injection Date:	14-Aug-2012 07:50:30	Limit Group:	TO-15-TO-15_MOD_ICAL
Client ID:	34000930	Instrument ID:	MSG
Lims Batch ID:	2369	Lims Sample ID:	33
Operator ID:	DLK		
Column Type:	RTX-Volatiles	Column Dia:	0.32 mm

Y Scaling: