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Water Resources Control Engineer
California Regional Water Quality Control Board, Site Cleanup Unit III
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Second Semiannual 2011 Soil Vapor Monitoring Report
Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California (SCP No. 0286A, Site ID No. 16638)

Dear Mr. Cho:

Parsons, on behalf of the Defense Logistics Agency (DLA) Energy, is pleased to submit the second semiannual 2011 soil vapor monitoring report for the Defense Fuel Support Point (DFSP) Norwalk, California site. This report provides the air laboratory data collected at the site for the vapor monitoring program as requested in the Regional Water Quality Control Boards (RWQCB) letter dated August 10, 2011 on the approval of the June 30th second work plan addendum. This report presents the results from the third and fourth quarters of 2011. The results from the first and second quarters 2011 were presented in the August 29, 2011 *First Semiannual 2011 Soil Vapor Monitoring Report*. This report also presents the site-specific calculated soil gas screening levels proposed for the detected site compounds. Lastly included is the proposed schedule for further vapor monitoring for the DFSP site.

1.0 Soil Vapor Sampling

The samples were collected from the seven vapor monitoring probes (VMP) that border the northern site property boundary, VMP-32 through VMP-38, and the three vapor monitoring locations, VMP-29 through VMP-31, in Holifield Park along the eastern park boundary, bordering Dolland Elementary School. Soil gas was sampled from each vapor monitoring location at two depths, 5 and 15 feet below ground surface (bgs). Therefore

during each quarter, 20 VMPs were purged and sampled. Figure 1 shows the locations of all the vapor monitoring probes.

Soil gas sampling was performed in general accordance with the Advisory for Active Soil Gas Investigation and updates, published by the California Environmental Protection Agency (CalEPA) and Department of Toxic Substances Control (DTSC)[1]. Soil gas samples were collected from each VMP after purging seven tubing volumes. After purging, soil gas samples were collected from each VMP in a Summa canister. Each Summa canister used during soil gas collection contained a dedicated flow regulator. The Summa canisters were filled (following purging) at a rate of less than 200 milliliters per minute. Once sampling was complete, the Summa canister was sealed and labeled (using non-volatile ink) with the sample location, sample depth, date, and time. The filled Summa canisters were transported to the laboratory (Calscience Environmental Laboratories, Incl.) immediately following testing. The samples were analyzed for volatile organic compounds (VOCs) using USEPA Method TO-15 for all events and fixed gases for the second, third, and fourth quarters 2011. The laboratory reports for the third and fourth quarter 2011 are included as Appendix A.

Table 1 presents a summary of the VOCs laboratory analytical results for those chemicals that were detected above the laboratory reporting limit for the following events: fourth quarter 2010 (December), first quarter 2011 (March), second quarter 2011 (June), third quarter 2011 (September), and fourth quarter 2011 (December). All other chemicals were below the laboratory reporting limit. Specifically looking at the third and fourth quarters 2011, there were 23 compounds detected at low concentrations above their laboratory reporting limit. The VOC detected at the highest concentration was isobutane - 0.45 micrograms per liter (µg/L) at VMP-31 at 15 feet bgs from the fourth quarter 2011. Benzene was not detected during the third and fourth quarters 2011. Toluene was detected at 19 samples (out of 40 for the two quarters) with the highest at VMP-29 at 5 feet bgs (0.0061 µg/L). Ethylbenzene was detected at four samples with the highest at VMP-31 at 15 feet bgs (0.003 µg/L).

Table 2 presents a summary of the laboratory fixed gases results for carbon dioxide, carbon monoxide, methane, nitrogen, oxygen plus argon, and total gaseous nonmethane organics (TGNMO). During the third and fourth quarters, methane was detected at one probe, VMP-32 at 5 feet bgs (16 parts per million [ppm]) and at the field blanks.

2.0 Proposed Soil Gas Screening Levels

This section presents the rationale and methods used to calculate site-specific soil gas screening levels that are proposed for use at the DFSP Norwalk site.

[1] California Environmental Protection Agency (CalEPA), 2010, *Advisory – Active Soil Gas Investigation*, March 3.

2.1 Calculation of Soil Gas Screening Levels

The advanced version of the Johnson and Ettinger model[2] was used to calculate soil gas screening levels protective of commercial workers for the chemicals detected in soil gas at the site. The Johnson and Ettinger model simulates the migration of volatiles in subsurface sources into indoor air due to diffusion and advection and advection. The model also estimates the concentrations of volatiles in indoor air and the risks from exposures to them.

The model accounts for chemical physical properties, soil properties, and building properties. The chemical properties used in the model were largely taken from the USEPA 2004 guidance document (Table 2). Other sources used are shown in Table 2. The soils above the water table at the site are highly variable and include sands, clays, and silts. However, there is at least one location (DP-8, located in the northeast corner of the site) where the soil column is sand from the surface down to the water table. Therefore, to provide health-protective screening levels, screening levels were calculated using the default properties for sand for 0-15 feet bgs to represent the site. Lastly, all building properties used in the model were defaults from DTSC[3] and USEPA (2004 and 2011)[4]. While DTSC (2011) provides a recommended air exchange rate of 1.0 per hour for commercial buildings, USEPA (2011) reviewed the available data and determined that measured air exchange rates in nonresidential structures in the United States range from 0.3 to 4.1 per hour (N=40) with an average of 1.5 per hour. USEPA (2011) recommends that the average air exchange rate be used for nonresidential structures and that recommendation is followed here. Soil and building properties used in the model are shown in Table 3.

The risks from assumed exposures to the estimated concentrations of volatiles in indoor air were estimated in the Johnson and Ettinger model using default exposure parameters for commercial workers (Table 3). Note, however, that the USEPA (2004) version of the Johnson and Ettinger model assumes that commercial workers are present at the site for 24 hours per day whereas the workday is assumed by USEPA[5,6] to last only 8 hours per day. Therefore, the equations in the USEPA (2004) version of the Johnson and Ettinger model that are used to calculate the risks and hazards from exposures were modified to the following (USEPA 2009):

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[2] United States Environmental Protection Agency (USEPA), 2004, *User's Guide for Evaluating Subsurface Vapor Intrusion Into Buildings.*

[3] DTSC, 2011, *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* (Vapor Intrusion Guidance), Final.

[4] USEPA, 2011, Exposure Factors Handbook: 2011 Edition. EPA/600/R-09/052F.

[5] USEPA, 2009, Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual. Part F, Supplemental Guidance for Inhalation Risk Assessment. EPA-540-R-070-002. OSWER 9285.7-82.

[6] USEPA, 2012a, Regional Screening Levels for Chemical Contaminants at Superfund Sites. Available online at: http://www.epa.gov/region09/superfund/prg/index.html

$$Risk = \frac{C_a \times ET \times EF \times ED \times IUR}{AT}$$

$$HQ = \frac{C_a \times ET \times EF \times ED}{AT \times RfC \times 1{,}000\ \frac{\mu g}{mg}}$$

where:

C_a = Indoor air concentration estimated by the Johnson and Ettinger model (USEPA 2004) (µg/m^3)
HQ = Estimated hazard quotient (unitless)
Risk = Estimated cancer risk (unitless)
ET = fraction of day spent in the building at the site (unitless)
EF = Exposure frequency (days/yr)
ED = Exposure duration (yrs)
AT = Averaging time (days)
IUR = Inhalation unit risk (µg/m^3)$^{-1}$
RfC = Reference concentration (mg/m^3)

The Inhalation Unit Risks and Reference Concentrations used in the above calculations were taken from the following hierarchy of sources (DTSC 2011, USEPA 2003[7], 2012a):

- Inhalation unit risks (IURs)
  - Office of Environmental Health Hazard Assessment's (OEHHA) (2012)[8] Toxicity Criteria Database
  - USEPA's (2012b)[9] Integrated Risk Information System (IRIS)
  - USEPA's (2012c)[10] Provisional Peer Reviewed Toxicity Values (PPRTVs) for Superfund
  - USEPA's (2012c) PPRTV screening toxicity values
  - USEPA's (1997)[11] Health Effects Assessment Summary Tables (HEAST)

[7] USEPA, 2003, Human Health Toxicity Values in Superfund Risk Assessments. OSWER Directive 9285.7-53.
[8] Office of Environmental Health Hazard Assessment (OEHHA), 2012, Toxicity Criteria Database. Available online at: http://www.oehha.org/risk/chemicalDB/index.asp.
[9] USEPA, 2012b, Integrated Risk Information System (IRIS). Available online at: http://cfpub.epa.gov/ncea/iris/index.cfm.
[10] USEPA, 2012c, Provisional Peer Reviewed Toxicity Values (PPRTVs) for Superfund. Available online at: http://hhprtv.ornl.gov.
[11] USEPA, 1997, Health Effects Assessment Summary Tables (HEAST). EPA-540-R-97-036.

- Reference concentrations (RfCs)
  - USEPA's (2012b) Integrated Risk Information System (IRIS)
  - USEPA's (2012c) Provisional Peer Reviewed Toxicity Values (PPRTVs) for Superfund
  - Agency for Toxic Substances and Disease Registry's (2012)[12] Minimal Risk Levels (MRLs)
  - USEPA's (2012c) PPRTV screening toxicity values
  - Office of Environmental Health Hazard Assessment's (OEHHA) (2012) Toxicity Criteria Database
  - USEPA's (1997) Health Effects Assessment Summary Tables (HEAST)

If inhalation toxicity values were unavailable, route-to-route extrapolations were used to calculate inhalation toxicity values from oral toxicity values (DTSC 1999)[13]. The IURs and RfCs used in this evaluation are shown in Table 4.

Note that toxicity values were not available for the 4-ethytoluene and isobutane. Therefore, screening levels for these two chemicals are not included here. The IURs and RfCs used in this evaluation are shown in Table 4.

While the soil gas version of the Johnson and Ettinger spreadsheets from USEPA (2004) calculates risks and hazards from assumed exposures to indoor air, it does not calculate soil gas screening levels. Therefore, to calculate screening levels, the following formulas were used:

$$SL_c = \frac{TR \times C_{sg}}{Risk}$$

$$SL_{nc} = \frac{THQ \times C_{sg}}{HQ}$$

where:

C_{sg} = Input soil gas concentration used in the Johnson and Ettinger model (USEPA 2004)
HQ = Hazard quotient estimated by the Johnson and Ettinger model (USEPA 2004)
Risk = Cancer risk estimated by the Johnson and Ettinger model (USEPA 2004)
SL_c = Cancer risk-based soil gas screening level
SL_{nc} = Noncancer-based soil gas screening level

[12] Agency for Toxic Substances and Disease Registry (ATSDR), 2012, Minimal Risk Levels (MRLs). Available online at: http://www.atsdr.cdc.gov/mrls/.
[13] DTSC, 1999, Preliminary Endangerment Assessment Guidance Manual. Second Printing.

THQ = target hazard quotient of 1.0
TR = target risk of 1×10^{-6}

2.2 Proposed Soil Gas Screening Levels

The calculated and proposed soil gas screening levels for each contaminant of concern are shown in Table 5. Soil gas screening levels have been calculated for each compound at 5 feet bgs and 15 feet bgs as shown on the table. The modified USEPA (2004) Johnson and Ettinger spreadsheets are shown in Appendix B.

2.3 Comparison of Detected Soil Gas Results to Proposed Soil Gas Screening Levels

Soil gas VOC data collected at the site was directly compared to the proposed commercial worker screening levels. Under most circumstances, chemicals in soil or soil gas at concentrations below screening levels can be assumed to pose an acceptable risk to people who may work at the site. The presence of chemicals at concentrations in excess of screening levels does not necessarily indicate that adverse impacts to human health are occurring but indicates that a potential for adverse risk may exist and that additional evaluation is warranted. Concentrations of detected VOCs in soil gas from the third and fourth quarters 2011 were all well below their respective proposed screening levels.

Based on the CalEPA soil gas advisory (CalEPA 2010), the proposed methane screening level is 1,000 ppm. The highest methane detected was 16 ppm which is well below the screening level.

3.0 Proposed Soil Vapor Monitoring Program and Schedule

No further soil vapor sampling is recommended at this time. If the property is redeveloped, a new source is identified, or the concentrations of VOCs in groundwater start increasing, the soil vapor monitoring program and schedule should be reassessed and a sampling event proposed. Groundwater from the northwest and northeastern areas should continue being extracted to contain the plume and prevent off-site migration. In addition, groundwater should continue to be sampled quarterly.

If you have any questions or require addition information please call me at (602) 734-1083. Parsons looks forward to your acceptance of the proposed soil gas cleanup goals and proposed schedule of no further vapor monitoring at this time.

Sincerely,

Redwan N. Hassan, P.G.
Program Manager

Attachments:

Tables

- Table 1 Detected Soil Gas VOC Analytical Summary
- Table 2 Laboratory Fixed Gases Results Summary
- Table 3 Physical Chemical Properties
- Table 4 Exposure Parameters, Building Properties, and Soil Properties
- Table 5 Toxicity Values
- Table 6 Proposed Soil Gas Screening Levels

Figure

- Figure 1 Vapor Monitoring Well Location Map

Appendices

- Appendix A Analytical Laboratory Reports
- Appendix B USEPA (2004) Johnson and Ettinger Spreadsheets

cc: File
Mr. Matthew Young, DLA-E
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Tables

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

Chemcial Name	Unit	VMP-29-05			VMP-29-15			VMP-30-05		
		2Q2011	3Q2011	4Q2011	2Q2011	3Q2011	4Q2011	2Q2011	3Q2011	4Q2011
1,2,4-Trimethylbenzene	µg/L	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	**0.0068**	< 0.0020	< 0.0020	**0.0045**	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.0044	**0.013**	< 0.0044	< 0.0044	**0.0097**	< 0.0044	< 0.0044	**0.017**	**0.0072**
2-Hexanone	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	**0.02**	**0.026**	< 0.0048	**0.021**	**0.04**	**0.014**	**0.021**	**0.054**	**0.042**
Benzene	µg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.0062	**0.014**	< 0.0062	< 0.0062	**0.022**	< 0.0062	< 0.0062	< 0.0062	< 0.0062
Carbon Tetrachloride	µg/L	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	**0.0063**	**0.011**	**0.0028**	< 0.0024	**0.003**	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	**0.0056**	**0.0047**	**0.0042**	< 0.0010	**0.0084**	**0.0032**	< 0.0010	**0.0034**	**0.0034**
Dichlorodifluoromethane	µg/L	**0.0031**	**0.0027**	**0.0032**	**0.0027**	**0.0027**	**0.0034**	< 0.0025	**0.0025**	**0.0032**
Ethylbenzene	µg/L	< 0.0022	**0.0022**	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
Isobutane	µg/L	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	**0.024**	< 0.012	< 0.012	< 0.012
Methylene Chloride	µg/L	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0022	**0.0025**	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	**0.0042**	< 0.0034	< 0.0034	< 0.0034	< 0.0034
Toluene	µg/L	< 0.0019	**0.0061**	< 0.0019	< 0.0019	**0.0029**	< 0.0019	< 0.0019	**0.0044**	**0.0023**
Trichloroethene	µg/L	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027
Vinyl Acetate	µg/L	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

Chemcial Name	Unit	VMP-30-15			VMP-31-05			VMP-31-15		
		2Q2011	3Q2011	4Q2011	2Q2011	3Q2011	4Q2011	2Q2011	3Q2011	4Q2011
1,2,4-Trimethylbenzene	µg/L	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.0044	**0.017**	**0.0048**	< 0.0044	**0.01**	< 0.0044	**0.0067**	**0.033**	< 0.0044
2-Hexanone	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	**0.023**	**0.08**	**0.018**	**0.012**	**0.042**	**0.0096**	**0.028**	**0.11**	**0.019**
Benzene	µg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	**0.0043**	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.0062	**0.022**	< 0.0062	< 0.0062	**0.017**	< 0.0062	< 0.0062	**0.014**	< 0.0062
Carbon Tetrachloride	µg/L	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0024	< 0.0024	< 0.0024	**0.021**	**0.065**	**0.013**	**0.03**	**0.039**	< 0.0024
Chloromethane	µg/L	< 0.0010	**0.0048**	< 0.0010	< 0.0010	**0.011**	**0.0029**	< 0.0010	**0.0074**	**0.0035**
Dichlorodifluoromethane	µg/L	< 0.0025	**0.0027**	**0.0032**	**0.0029**	**0.0028**	**0.0032**	**0.0029**	**0.0027**	**0.0033**
Ethylbenzene	µg/L	< 0.0022	< 0.0022	< 0.0022	< 0.0022	**0.0027**	< 0.0022	< 0.0022	**0.003**	< 0.0022
Isobutane	µg/L	< 0.012	**0.26**	**0.015**	< 0.012	< 0.012	< 0.012	**0.013**	**0.022**	**0.45**
Methylene Chloride	µg/L	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0022	< 0.0022	< 0.0022	**0.0046**	**0.0068**	< 0.0022	**0.0062**	**0.0067**	< 0.0022
p/m-Xylene	µg/L	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
Toluene	µg/L	< 0.0019	**0.002**	< 0.0019	< 0.0019	**0.0025**	< 0.0019	< 0.0019	**0.0033**	**0.0036**
Trichloroethene	µg/L	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027
Vinyl Acetate	µg/L	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

Chemcial Name	Unit	VMP-32-05					VMP-32-15				
		4Q2010	1Q2011	2Q2011	3Q2011	4Q2011	4Q2010	1Q2011	2Q2011	3Q2011	4Q2011
1,2,4-Trimethylbenzene	µg/L	< 0.018	< 0.0074	< 0.018	< 0.0074	< 0.0074	< 0.017	< 0.0089	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0074	< 0.0030	< 0.0075	< 0.0030	**0.041**	< 0.0071	< 0.0036	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0050	< 0.0020	< 0.0051	< 0.0020	< 0.0020	< 0.0048	**0.011**	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0060	< 0.0025	< 0.0061	< 0.0025	< 0.0025	< 0.0058	< 0.0030	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0074	< 0.0030	< 0.0075	< 0.0030	**0.0031**	< 0.0071	< 0.0036	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0074	< 0.0030	< 0.0075	< 0.0030	**0.012**	< 0.0071	< 0.0036	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.011	< 0.0044	< 0.011	**0.013**	**0.016**	**0.028**	< 0.0054	**0.0074**	**0.015**	< 0.0044
2-Hexanone	µg/L	< 0.015	< 0.0061	< 0.015	< 0.0061	< 0.0061	< 0.015	< 0.0074	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0060	< 0.0025	< 0.0061	< 0.0025	< 0.0025	< 0.0058	< 0.0030	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	**0.031**	**0.047**	**0.023**	**0.023**	**0.079**	**0.15**	**0.036**	**0.042**	**0.016**	**0.014**
Benzene	µg/L	< 0.0039	< 0.0016	< 0.0040	< 0.0016	< 0.0016	< 0.0038	< 0.0019	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0082	< 0.0034	< 0.0084	< 0.0034	< 0.0034	< 0.0079	< 0.0041	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0049	< 0.0020	< 0.0050	< 0.0020	< 0.0020	< 0.0047	< 0.0024	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.015	< 0.0062	< 0.016	**0.014**	**0.0066**	< 0.015	< 0.0075	< 0.0062	< 0.0062	**0.0092**
Carbon Tetrachloride	µg/L	< 0.0077	< 0.0031	< 0.0079	**0.0033**	< 0.0031	< 0.0075	< 0.0038	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0060	< 0.0024	< 0.0061	< 0.0024	< 0.0024	< 0.0058	< 0.0030	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0025	< 0.0010	**0.0042**	**0.007**	**0.0026**	< 0.0024	< 0.0012	**0.0059**	< 0.0010	**0.0034**
Dichlorodifluoromethane	µg/L	< 0.0061	< 0.0025	< 0.0062	**0.0031**	**0.0028**	< 0.0059	< 0.0030	**0.0026**	< 0.0025	< 0.0025
Ethylbenzene	µg/L	< 0.0053	< 0.0022	< 0.0054	**0.0025**	< 0.0022	**0.0064**	< 0.0026	**0.019**	< 0.0022	< 0.0022
Isobutane	µg/L	--	**0.11**	**24**	**0.36**	< 0.012	--	< 0.014	**5.5**	< 0.012	< 0.012
Methylene Chloride	µg/L	< 0.043	< 0.017	< 0.043	< 0.017	< 0.017	< 0.041	< 0.021	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0053	< 0.0022	< 0.0054	**0.0031**	< 0.0022	**0.015**	< 0.0026	**0.0053**	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.021	< 0.0087	< 0.022	< 0.0087	< 0.0087	**0.024**	< 0.011	**0.013**	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.015	< 0.0061	< 0.015	< 0.0061	**0.027**	< 0.014	< 0.0073	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	**0.11**	**0.073**	**0.014**	< 0.0034	**0.076**	**0.31**	**0.16**	< 0.0034	**0.14**	**0.28**
Toluene	µg/L	< 0.0046	< 0.0019	< 0.0047	**0.006**	**0.0032**	**0.0067**	< 0.0023	**0.002**	**0.0036**	< 0.0019
Trichloroethene	µg/L	< 0.0066	< 0.0027	< 0.0067	< 0.0027	< 0.0027	< 0.0064	**0.015**	< 0.0027	< 0.0027	< 0.0027
Vinyl Acetate	µg/L	< 0.017	< 0.0070	< 0.018	< 0.0070	**0.011**	< 0.017	< 0.0085	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

		VMP-33-05					VMP-33-15				
Chemcial Name	**Unit**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**
1,2,4-Trimethylbenzene	µg/L	< 0.019	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.010	< 0.0074	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0076	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0041	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0051	**0.0035**	< 0.0020	< 0.0020	< 0.0020	< 0.0028	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0062	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0033	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0076	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0041	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0076	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0041	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.011	< 0.0044	< 0.0044	**0.0058**	**0.0071**	< 0.0060	< 0.0044	**0.0051**	**0.0051**	< 0.0044
2-Hexanone	µg/L	< 0.016	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0084	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0062	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0033	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	< 0.012	**0.041**	**0.014**	**0.011**	**0.025**	**0.01**	**0.052**	**0.036**	**0.017**	**0.024**
Benzene	µg/L	< 0.0041	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0022	< 0.0016	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0085	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0046	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0050	< 0.0020	< 0.0020	< 0.0020	**0.0029**	< 0.0027	< 0.0020	< 0.0020	**0.003**	< 0.0020
Carbon Disulfide	µg/L	< 0.016	< 0.0062	< 0.0062	**0.011**	**0.01**	< 0.0085	< 0.0062	< 0.0062	**0.011**	**0.0069**
Carbon Tetrachloride	µg/L	< 0.0080	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0043	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0062	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0033	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0026	< 0.0010	< 0.0010	**0.0024**	**0.0033**	< 0.0014	< 0.0010	**0.0023**	**0.0041**	**0.0031**
Dichlorodifluoromethane	µg/L	< 0.0063	**0.0027**	**0.0028**	**0.0028**	**0.003**	< 0.0034	< 0.0025	**0.0028**	**0.0028**	**0.0025**
Ethylbenzene	µg/L	< 0.0055	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0030	< 0.0022	**0.013**	< 0.0022	< 0.0022
Isobutane	µg/L	--	**0.013**	< 0.012	< 0.012	< 0.012	--	**0.013**	**0.9**	< 0.012	< 0.012
Methylene Chloride	µg/L	< 0.044	< 0.017	< 0.017	< 0.017	< 0.017	< 0.024	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0055	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0030	< 0.0022	**0.0045**	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.022	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.012	< 0.0087	**0.011**	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.015	< 0.0061	< 0.0061	< 0.0061	**0.011**	< 0.0082	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0086	**0.0037**	< 0.0034	< 0.0034	**0.0067**	**0.016**	< 0.0034	< 0.0034	**0.0046**	**0.0055**
Toluene	µg/L	**0.0057**	< 0.0019	< 0.0019	**0.0023**	**0.0028**	**0.0071**	< 0.0019	< 0.0019	< 0.0019	**0.0029**
Trichloroethene	µg/L	< 0.0068	**0.0048**	< 0.0027	< 0.0027	**0.41**	< 0.0037	< 0.0027	< 0.0027	< 0.0027	**0.0043**
Vinyl Acetate	µg/L	< 0.018	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0096	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

		VMP-34-05					VMP-34-15					
Chemcial Name	**Unit**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**	**4Q2011 (dup)**
1,2,4-Trimethylbenzene	µg/L	< 0.018	**0.0095**	< 0.0074	< 0.0074	< 0.0074	< 0.018	**0.064**	< 0.0074	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0073	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0074	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0049	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0060	**0.0043**	< 0.0025	< 0.0025	< 0.0025	< 0.0060	**0.039**	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0073	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0074	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0073	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0074	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.011	**0.0051**	**0.0057**	**0.011**	**0.01**	< 0.011	**0.0063**	**0.028**	**0.0075**	**0.012**	**0.01**
2-Hexanone	µg/L	< 0.015	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.015	< 0.0061	**0.0079**	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0060	**0.0025**	< 0.0025	< 0.0025	< 0.0025	< 0.0060	**0.016**	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	< 0.012	**0.043**	**0.034**	**0.022**	**0.043**	< 0.012	**0.053**	**0.089**	**0.024**	**0.033**	**0.034**
Benzene	µg/L	< 0.0039	< 0.0016	< 0.0016	< 0.0016	< 0.0016	**0.011**	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0082	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0082	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0048	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0049	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.015	< 0.0062	< 0.0062	**0.0069**	**0.0082**	< 0.015	< 0.0062	< 0.0062	< 0.0062	< 0.0062	< 0.0062
Carbon Tetrachloride	µg/L	< 0.0077	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0077	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0060	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0060	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0025	< 0.0010	**0.0085**	**0.0087**	**0.0052**	< 0.0025	**0.0013**	**0.0054**	**0.0022**	**0.0019**	< 0.0010
Dichlorodifluoromethane	µg/L	**0.0067**	< 0.0025	**0.0027**	**0.0028**	**0.0026**	< 0.0061	**0.0028**	**0.0026**	**0.0028**	**0.0033**	**0.0027**
Ethylbenzene	µg/L	< 0.0053	**0.0051**	< 0.0022	< 0.0022	< 0.0022	< 0.0053	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
Isobutane	µg/L	--	< 0.012	< 0.012	< 0.012	< 0.012	--	**0.11**	**0.016**	**0.013**	**0.03**	**0.15**
Methylene Chloride	µg/L	< 0.042	< 0.017	< 0.017	< 0.017	< 0.017	< 0.043	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0053	**0.0028**	< 0.0022	< 0.0022	< 0.0022	< 0.0053	**0.01**	< 0.0022	< 0.0022	**0.0022**	< 0.0022
p/m-Xylene	µg/L	< 0.021	**0.013**	< 0.0087	< 0.0087	< 0.0087	< 0.021	**0.013**	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.015	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.015	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0083	< 0.0034	< 0.0034	**0.01**	**0.0091**	**0.013**	< 0.0034	**0.0036**	**0.0045**	**0.013**	**0.011**
Toluene	µg/L	**0.0051**	< 0.0019	< 0.0019	**0.0023**	**0.0025**	**0.026**	**0.0021**	< 0.0019	< 0.0019	**0.0029**	**0.0019**
Trichloroethene	µg/L	< 0.0066	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0066	< 0.0027	< 0.0027	< 0.0027	**0.047**	**0.075**
Vinyl Acetate	µg/L	< 0.017	< 0.0070	< 0.0070	< 0.0070	**0.0078**	< 0.017	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

		VMP-35-05						VMP-35-15				
Chemcial Name	**Unit**	**4Q2010**	**4Q2010 (dup)**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**
1,2,4-Trimethylbenzene	µg/L	< 0.018	< 0.020	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0072	< 0.0080	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	**0.013**	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0048	< 0.0054	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0058	< 0.0066	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0072	< 0.0080	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0072	< 0.0080	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	**0.0049**	< 0.0030
2-Butanone	µg/L	< 0.011	< 0.012	< 0.0044	**0.01**	**0.0096**	< 0.0044	< 0.0044	**0.0088**	**0.011**	**0.014**	**0.0076**
2-Hexanone	µg/L	< 0.015	< 0.016	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0058	< 0.0066	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	< 0.011	**0.013**	**0.041**	**0.043**	**0.023**	**0.018**	**0.011**	**0.032**	**0.053**	**0.089**	**0.084**
Benzene	µg/L	< 0.0038	< 0.0043	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	**0.002**	< 0.0016
Bromodichloromethane	µg/L	< 0.0080	< 0.0089	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0047	< 0.0053	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.015	< 0.017	< 0.0062	< 0.0062	**0.0085**	**0.0095**	**0.0072**	< 0.0062	**0.0093**	**0.031**	**0.028**
Carbon Tetrachloride	µg/L	< 0.0075	< 0.0084	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0058	< 0.0065	< 0.0024	< 0.0024	< 0.0024	< 0.0024	**0.0027**	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0025	< 0.0028	< 0.0010	**0.0063**	**0.0032**	**0.0045**	< 0.0010	**0.0012**	< 0.0010	**0.0065**	**0.017**
Dichlorodifluoromethane	µg/L	< 0.0059	< 0.0066	**0.0031**	**0.0027**	**0.0027**	**0.0026**	< 0.0025	**0.0029**	**0.0028**	**0.0027**	**0.0026**
Ethylbenzene	µg/L	< 0.0052	< 0.0058	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
Isobutane	µg/L	--	--	**0.015**	< 0.012	< 0.012	< 0.012	--	< 0.012	**0.019**	**0.014**	**0.025**
Methylene Chloride	µg/L	< 0.041	< 0.046	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0052	**0.0069**	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.021	< 0.023	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.014	< 0.016	< 0.0061	< 0.0061	< 0.0061	**0.03**	< 0.0061	**0.011**	< 0.0061	< 0.0061	**0.0086**
Tetrachloroethene	µg/L	< 0.0081	< 0.0091	< 0.0034	< 0.0034	**0.0059**	**0.027**	**0.0064**	< 0.0034	< 0.0034	**0.0057**	**0.0039**
Toluene	µg/L	< 0.0045	**0.016**	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.0039**	**0.0022**	< 0.0019	< 0.0019	< 0.0019
Trichloroethene	µg/L	< 0.0064	< 0.0072	< 0.0027	< 0.0027	< 0.0027	**0.19**	< 0.0027	< 0.0027	< 0.0027	< 0.0027	**0.005**
Vinyl Acetate	µg/L	< 0.017	< 0.019	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

Chemcial Name	Unit	VMP-36-05					VMP-36-15					
		4Q2010	1Q2011	2Q2011	3Q2011	4Q2011	4Q2010	1Q2011	2Q2011	2Q2011 (dup)	3Q2011	4Q2011
1,2,4-Trimethylbenzene	µg/L	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.0044	< 0.0044	**0.0045**	**0.011**	< 0.0044	< 0.0044	< 0.0044	**0.0061**	< 0.0044	**0.014**	< 0.0044
2-Hexanone	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	**0.0074**	**0.011**	**0.025**	**0.055**	**0.019**	**0.0071**	**0.02**	**0.041**	**0.023**	**0.083**	**0.017**
Benzene	µg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.0062	< 0.0062	< 0.0062	**0.023**	< 0.0062	< 0.0062	< 0.0062	< 0.0062	< 0.0062	**0.014**	**0.0076**
Carbon Tetrachloride	µg/L	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0010	< 0.0010	< 0.0010	**0.0024**	**0.0018**	< 0.0010	< 0.0010	**0.0011**	**0.0015**	**0.0044**	**0.0023**
Dichlorodifluoromethane	µg/L	< 0.0025	**0.003**	**0.0028**	**0.0026**	**0.0028**	< 0.0025	**0.0032**	**0.0027**	**0.0028**	**0.0026**	< 0.0025
Ethylbenzene	µg/L	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
Isobutane	µg/L	--	< 0.012	< 0.012	< 0.012	**0.021**	--	**0.32**	< 0.012	**0.12**	< 0.012	< 0.012
Methylene Chloride	µg/L	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	**0.0065**	**0.0036**	< 0.0034	< 0.0034	**0.0038**	**0.0071**
Toluene	µg/L	**0.0033**	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.003**	< 0.0019	**0.0031**	**0.0045**	< 0.0019	< 0.0019
Trichloroethene	µg/L	< 0.0027	< 0.0027	< 0.0027	< 0.0027	**0.0031**	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027
Vinyl Acetate	µg/L	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

		VMP-37-05					VMP-37-15					
Chemcial Name	**Unit**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**3Q2011 (dup)**	**4Q2011**
1,2,4-Trimethylbenzene	µg/L	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	**0.0077**
1,2-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	< 0.0044	< 0.0044	< 0.0044	**0.0059**	< 0.0044	< 0.0044	< 0.0044	**0.0081**	**0.015**	**0.008**	**0.0062**
2-Hexanone	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	**0.0025**
Acetone	µg/L	**0.0078**	**0.016**	**0.024**	**0.046**	**0.025**	**0.0048**	**0.037**	**0.052**	**0.091**	**0.041**	**0.033**
Benzene	µg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.0062	< 0.0062	< 0.0062	**0.011**	**0.0073**	< 0.0062	< 0.0062	< 0.0062	**0.01**	< 0.0062	**0.014**
Carbon Tetrachloride	µg/L	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0010	< 0.0010	< 0.0010	**0.0034**	**0.0032**	< 0.0010	< 0.0010	**0.0017**	**0.0041**	**0.0016**	**0.0039**
Dichlorodifluoromethane	µg/L	**0.0026**	**0.0032**	**0.0028**	**0.0026**	**0.0031**	**0.0028**	**0.003**	**0.0029**	**0.0027**	< 0.0025	**0.0026**
Ethylbenzene	µg/L	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	**0.0025**	< 0.0022	< 0.0022	< 0.0022
Isobutane	µg/L	--	< 0.012	< 0.012	< 0.012	< 0.012	--	**1.1**	**2.4**	**0.028**	**0.012**	**0.033**
Methylene Chloride	µg/L	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	**0.032**
o-Xylene	µg/L	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	**0.0045**	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
Toluene	µg/L	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	**0.0023**	< 0.0019	< 0.0019	**0.0028**	< 0.0019	< 0.0019
Trichloroethene	µg/L	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027
Vinyl Acetate	µg/L	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

Table 1
Detected Soil Gas VOC Analytical Summary
DFSP Norwalk Site

		VMP-38-05						VMP-38-15				
Chemcial Name	**Unit**	**4Q2010**	**1Q2011**	**1Q2011 (dup)**	**2Q2011**	**3Q2011**	**4Q2011**	**4Q2010**	**1Q2011**	**2Q2011**	**3Q2011**	**4Q2011**
1,2,4-Trimethylbenzene	µg/L	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	**0.016**	< 0.0074	< 0.0074	< 0.0074
1,2-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,2-Dichloroethane	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
1,3,5-Trimethylbenzene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	**0.0046**	< 0.0025	< 0.0025	< 0.0025
1,3-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
1,4-Dichlorobenzene	µg/L	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
2-Butanone	µg/L	**0.0081**	**0.007**	**0.0073**	**0.0078**	**0.019**	**0.005**	< 0.0044	< 0.0044	< 0.0044	**0.014**	**0.0067**
2-Hexanone	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
4-Ethyltoluene	µg/L	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	**0.0027**	< 0.0025	< 0.0025	< 0.0025
Acetone	µg/L	**0.0096**	**0.032**	**0.029**	**0.035**	**0.089**	**0.029**	**0.01**	**0.066**	**0.041**	**0.11**	**0.052**
Benzene	µg/L	< 0.0016	**0.0026**	**0.0026**	< 0.0016	< 0.0016	< 0.0016	**0.0036**	**0.0047**	< 0.0016	< 0.0016	< 0.0016
Bromodichloromethane	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
c-1,2-Dichloroethene	µg/L	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Carbon Disulfide	µg/L	< 0.0062	< 0.0062	< 0.0062	< 0.0062	**0.023**	< 0.0062	< 0.0062	< 0.0062	< 0.0062	**0.0089**	< 0.0062
Carbon Tetrachloride	µg/L	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031	< 0.0031
Chloroform	µg/L	< 0.0024	< 0.0024	< 0.0024	**0.0027**	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024	< 0.0024
Chloromethane	µg/L	< 0.0010	< 0.0010	**0.0014**	**0.001**	**0.0091**	**0.0034**	< 0.0010	< 0.0010	**0.0046**	**0.0022**	< 0.0010
Dichlorodifluoromethane	µg/L	**0.0029**	**0.0032**	**0.003**	**0.0028**	**0.0027**	**0.0029**	< 0.0025	< 0.0025	**0.0025**	< 0.0025	**0.0028**
Ethylbenzene	µg/L	< 0.0022	**0.0023**	**0.0022**	< 0.0022	< 0.0022	< 0.0022	< 0.0022	**0.0022**	< 0.0022	< 0.0022	< 0.0022
Isobutane	µg/L	--	**0.051**	**0.049**	< 0.012	**0.026**	< 0.012	--	**1.3**	< 0.012	< 0.012	**0.016**
Methylene Chloride	µg/L	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
o-Xylene	µg/L	< 0.0022	**0.0022**	**0.0022**	< 0.0022	< 0.0022	< 0.0022	< 0.0022	**0.005**	< 0.0022	< 0.0022	< 0.0022
p/m-Xylene	µg/L	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087	< 0.0087
Tert-Butyl Alcohol (TBA)	µg/L	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Tetrachloroethene	µg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	**0.014**	**0.011**	**0.013**	**0.013**	**0.017**
Toluene	µg/L	**0.0032**	**0.0043**	**0.0042**	< 0.0019	< 0.0019	< 0.0019	**0.0097**	**0.0021**	< 0.0019	< 0.0019	< 0.0019
Trichloroethene	µg/L	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027	< 0.0027
Vinyl Acetate	µg/L	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070	< 0.0070

4Q2010 = fourth quarter 2010 (sampled in December 2010)
1Q2011 = first quarter 2011 (sampled in March 2011)
2Q2011 = second quarter 2011 (sampled in June 2011)
3Q2011 = third quarter 2011 (sampled in September 2011)
4Q2011 = fourth quarter 2011 (sampled in December 2011)
µg/L = micrograms per liter

Table 2
Laboratory Fixed Gases Results Summary
DFSP Norwalk Site

Sample Location	Date Sampled	Carbon Dioxide %V	Carbon Dioxide ppm (v/v)	Carbon Monoxide ppm (v/v)	Methane ppm (v/v)	Nitrogen %V	Oxygen + Argon %V	TGNMO ppm (v/v)
Field Blank	10-Jun-11	--	**570**	< 5.0	**1.9**	**78**	**22**	< 5.0
Field Blank	27-Sep-11	--	**450**	< 5.0	**2.4**	**78**	**22**	< 5.0
Field Blank	22-Dec-11	--	**430**	< 5.0	**2**	**77**	**23**	< 5.0
VMP-29-05	10-Jun-11	**2.3**	--	< 5.0	< 1.0	**78**	**20**	< 5.0
	27-Sep-11	**3.4**	--	< 5.0	< 1.0	**78**	**19**	< 5.0
	23-Dec-11	**2.5**	--	< 5.0	< 1.0	**77**	**21**	< 5.0
VMP-29-15	08-Jun-11	**2.5**	--	< 5.0	< 1.0	**78**	**19**	< 5.0
	27-Sep-11	**3.2**	--	< 5.0	< 1.0	**78**	**19**	< 5.0
	23-Dec-11	**3.4**	--	< 5.0	< 1.0	**77**	**20**	**6**
VMP-30-05	08-Jun-11	**4.2**	--	< 5.0	< 1.0	**77**	**18**	< 5.0
	27-Sep-11	**5.8**	--	< 5.0	< 1.0	**77**	**17**	< 5.0
	23-Dec-11	**4.1**	--	< 5.0	< 1.0	**76**	**20**	< 5.0
VMP-30-15	08-Jun-11	**4.8**	--	< 5.0	< 1.0	**78**	**17**	< 5.0
	27-Sep-11	**5.5**	--	< 5.0	< 1.0	**77**	**18**	< 5.0
	23-Dec-11	**5.5**	--	< 5.0	< 1.0	**75**	**19**	< 5.0
VMP-31-05	08-Jun-11	**3**	--	< 5.0	< 1.0	**78**	**19**	< 5.0
	27-Sep-11	**5.6**	--	< 5.0	< 1.0	**78**	**17**	< 5.0
	23-Dec-11	**4.3**	--	< 5.0	< 1.0	**76**	**19**	< 5.0
VMP-31-15	08-Jun-11	< 0.50	--	< 5.0	< 1.0	**75**	**17**	< 5.0
	27-Sep-11	**5.4**	--	< 5.0	< 1.0	**77**	**18**	< 5.0
	23-Dec-11	**4.1**	--	< 5.0	< 1.0	**76**	**19**	**9.5**
VMP-32-05	09-Jun-11	**1**	--	< 5.0	**1.6**	**78**	**21**	**42**
	26-Sep-11	--	**760**	< 5.0	**16**	**78**	**22**	< 5.0
	22-Dec-11	**5.8**	--	< 5.0	< 1.0	**77**	**17**	< 5.0
VMP-32-15	09-Jun-11	--	**2500**	< 5.0	**1.7**	**78**	**22**	**25**
	26-Sep-11	**13**	--	< 5.0	< 1.0	**79**	**7.9**	< 5.0
	22-Dec-11	**12**	--	< 5.0	< 1.0	**77**	**11**	< 5.0
VMP-33-05	09-Jun-11	**1.1**	--	< 5.0	< 1.0	**79**	**20**	< 5.0
	26-Sep-11	**1.4**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	22-Dec-11	**0.91**	--	< 5.0	< 1.0	**78**	**21**	**9.3**
VMP-33-15	09-Jun-11	--	**720**	< 5.0	**1.7**	**78**	**22**	< 5.0
	26-Sep-11	**2.1**	--	< 5.0	< 1.0	**78**	**20**	< 5.0
	22-Dec-11	**2**	--	< 5.0	< 1.0	**77**	**21**	**8**
VMP-34-05	09-Jun-11	**1.2**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	**0.95**	--	< 5.0	< 1.0	**77**	**22**	< 5.0
	22-Dec-11	**0.98**	--	< 5.0	< 1.0	**77**	**22**	**9.9**
VMP-34-15	09-Jun-11	**2.5**	--	< 5.0	< 1.0	**78**	**19**	< 5.0
	26-Sep-11	**2.8**	--	< 5.0	< 1.0	**77**	**20**	< 5.0
	22-Dec-11	**2.9**	--	< 5.0	< 1.0	**76**	**21**	**5.7**
dup	22-Dec-11	**2.8**	--	< 5.0	< 1.0	**76**	**21**	**7.3**
VMP-35-05	09-Jun-11	--	**4000**	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	--	**4500**	< 5.0	< 1.0	**78**	**22**	**5.4**
	22-Dec-11	--	**4300**	< 5.0	< 1.0	**77**	**23**	**8.6**

Table 2
Laboratory Fixed Gases Results Summary
DFSP Norwalk Site

Sample Location	Date Sampled	Carbon Dioxide %V	Carbon Dioxide ppm (v/v)	Carbon Monoxide ppm (v/v)	Methane ppm (v/v)	Nitrogen %V	Oxygen + Argon %V	TGNMO ppm (v/v)
VMP-35-15	09-Jun-11	**1.2**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	**1.6**	--	< 5.0	< 1.0	**77**	**21**	< 5.0
	22-Dec-11	**1.6**	--	< 5.0	< 1.0	**77**	**22**	**8.5**
VMP-36-05	09-Jun-11	**0.83**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	**0.61**	--	< 5.0	< 1.0	**78**	**22**	< 5.0
	22-Dec-11	--	**3600**	< 5.0	< 1.0	**77**	**23**	**8.9**
VMP-36-15	10-Jun-11	**2.2**	--	< 5.0	< 1.0	**78**	**20**	< 5.0
dup	10-Jun-11	**1.2**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	**2.8**	--	< 5.0	< 1.0	**78**	**20**	< 5.0
	22-Dec-11	**2.7**	--	< 5.0	< 1.0	**77**	**21**	**5.7**
VMP-37-05	09-Jun-11	**1.2**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	**1.1**	--	< 5.0	< 1.0	**77**	**21**	**5.1**
	22-Dec-11	**0.8**	--	< 5.0	< 1.0	**77**	**22**	**8.7**
VMP-37-15	10-Jun-11	--	**2200**	< 5.0	**1.6**	**78**	**22**	< 5.0
	26-Sep-11	**1.4**	--	< 5.0	< 1.0	**77**	**21**	**5.1**
dup	26-Sep-11	**1.4**	--	< 5.0	< 1.0	**77**	**21**	< 5.0
	22-Dec-11	**1.1**	--	< 5.0	< 1.0	**77**	**22**	**8**
VMP-38-05	10-Jun-11	**1.3**	--	< 5.0	< 1.0	**78**	**21**	< 5.0
	26-Sep-11	**0.82**	--	< 5.0	< 1.0	**78**	**22**	< 5.0
	22-Dec-11	**0.6**	--	< 5.0	< 1.0	**77**	**22**	**8.8**
VMP-38-15	10-Jun-11	**5**	--	< 5.0	< 1.0	**79**	**16**	< 5.0
	26-Sep-11	**5.9**	--	< 5.0	< 1.0	**78**	**16**	< 5.0
	22-Dec-11	**5.2**	--	< 5.0	< 1.0	**77**	**18**	< 5.0

%V = percent by volume
ppm (v/v) = parts per million
TGNMO = total gaseous nonmethane organics
dup = duplicate
Second quarter 2011 sampled June 8-10, 2011.
Third quarter 2011 sampled September 26-27, 2011.
Fourth quarter 2011 sampled December 22-23, 2011.

Table 3
Physical Chemical Properties
DFSP Norwalk Site

		Parameter Value								
CAS	**Chemical**	**D_{air} (cm^2/s)**	**D_{wat} (cm^2/s)**	**S (mg/L)**	**H' (unitless)**	**H (atm-m^3/mol)**	**T_R (^oC)**	**T_B (^oK)**	**T_C (^oK)**	**$\Delta H_{v,b}$ (cal/mol)**
95636	1,2,4-Trimethylbenzene	6.06E-02	7.92E-06	5.70E+01	2.52E-01	6.14E-03	25	442.3	649.17	9,369
95501	1,2-Dichlorobenzene	6.90E-02	7.90E-06	1.56E+02	7.77E-02	1.90E-03	25	453.57	705	9,700
107062	1,2-Dichloroethane	1.04E-01	9.90E-06	8.52E+03	4.00E-02	9.77E-04	25	356.65	561	7,643
108678	1,3,5-Trimethylbenzene	6.02E-02	8.67E-06	2.00E+00	2.41E-01	5.87E-03	25	437.89	637.25	9,321
541731	1,3-Dichlorobenzene	6.92E-02	7.86E-06	1.34E+02	1.27E-01	3.09E-03	25	446	684	9,230
106467	1,4-Dichlorobenzene	6.90E-02	7.90E-06	7.90E+01	9.82E-02	2.39E-03	25	447.21	684.75	9,271
78933	2-Butanone (methyl ethyl ketone)	8.08E-02	9.80E-06	2.23E+05	2.29E-03	5.58E-05	25	352.5	536.78	7,481
591786	2-Hexanone	*7.05E-02*	*7.80E-06*	**1.72E+04**	*3.32E-03*	*8.10E-05*	*25*	400	586.6	10,301
67641	Acetone	1.24E-01	1.14E-05	1.00E+06	1.59E-03	3.87E-05	25	329.2	508.1	6,955
71432	Benzene	8.80E-02	9.80E-06	1.79E+03	2.27E-01	5.54E-03	25	353.24	562.16	7,342
75274	Bromodichloromethane	2.98E-02	1.06E-05	6.74E+03	6.54E-02	1.60E-03	25	363.15	585.85	7,800
156592	c-1,2-Dichloroethene	7.36E-02	1.13E-05	3.50E+03	1.67E-01	4.07E-03	25	333.65	544.00	7,192
75150	Carbon disulfide	1.04E-01	1.00E-05	1.19E+03	1.24E+00	3.02E-02	25	319	552	6,391
56235	Carbon tetrachloride	7.80E-02	8.80E-06	7.93E+02	1.24E+00	3.03E-02	25	349.9	556.6	7,127
67663	Chloroform	1.04E-01	1.00E-05	7.92E+03	1.50E-01	3.66E-03	25	334.32	536.4	6,988
74873	Chloromethane	1.26E-01	6.50E-06	5.33E+03	3.61E-01	8.80E-03	25	249.00	416.25	5,115
75718	Dichlorodifluoromethane (Freon 12)	6.65E-02	9.92E-06	2.80E+02	1.40E+01	3.42E-01	25	243.2	384.95	9,421
100414	Ethylbenzene	7.50E-02	7.80E-06	1.69E+02	3.22E-01	7.86E-03	25	409.34	617.2	8,501
75092	Methylene chloride	1.01E-01	1.17E-05	1.30E+04	8.96E-02	2.18E-03	25	313	510	6,706
95476	o-Xylene	8.70E-02	1.00E-05	1.78E+02	2.12E-01	5.18E-03	25	417.6	630.3	8,661
106423	p/m-Xylene	7.69E-02	8.44E-06	1.85E+02	3.13E-01	7.64E-03	25	411.52	616.2	8,525
75650	Tert-Butyl Alcohol (TBA)	*8.73E-02*	*9.80E-06*	**1.00E+06**	5.78E-04	1.41E-05	25	355.5	506.2	9,338
127184	Tetrachloroethene (PCE)	7.20E-02	8.20E-06	2.00E+02	7.53E-01	1.84E-02	25	394.4	620.2	8,288
108883	Toluene	8.70E-02	8.60E-06	5.26E+02	2.72E-01	6.62E-03	25	383.78	591.79	7,930
79016	Trichloroethene	7.90E-02	9.10E-06	1.47E+03	4.21E-01	1.03E-02	25	360.36	544.2	7,505
75014	Vinyl acetate	8.50E-02	9.20E-06	2.00E+04	2.09E-02	5.10E-04	25	345.65	519.13	7,800

Sources:

All parameter values were taken from USEPA (2004), except for those indicated as follows:

Underlined = from National Institute of Standards and Technology (http://webbook.nist.gov/chemistry/name-ser.html)

Italics = Montgomery JH. 2007. Groundwater chemicals desk reference. 4th edition. CRC Press.

Bold = USEPA's WATER9 version 3.0 (http://www.epa.gov/ttn/chief/software/water/water9_3/index.html)

Bold-Underline - USEPA's EpiSuite v4.1 (http://www.epa.gov/oppt/exposure/pubs/episuite.htm)

Italics-underline - Yaws CL. 2003. Yaws' Handbook of Thermodynamic and Physical Properties of Chemical Compounds (http://www.knovel.com/web/portal/basic_search/display?_EXT_KNOVEL_DISPLAY_bookid=667)

Definitions:

Dair (cm^2/s) = Diffusivity in air, measured in centimeters squared per second

Dwat (cm^2/s) = Diffusivity in water, measured in centimeters squared per second

S (mg/L) = Solubility in water, measured in milligrams per liter

H' (unitless) - Unitless Henry's law constant

H (atm-m^3/mol) - Henry's law constant, measured in atmospheres cubic meter per mole

T_R (°C) - Reference temperature for Henry's law constant, measured in degrees celsius

T_B (°K) - Boiling point, measured in degrees Kelvin

T_C (°K) - Critical temperature, measured in degrees Kelvin

$\Delta H_{v,b}$ (cal/mol) - Enthalopy of vaporization at the normal boiling point, measured in calories per mole

Table 4
Exposure Parameters, Building Properties, and Soil Properties
DFSP Norwalk Site

Parameter		Units	Value	Reference
Symbol	**Description**			
Exposure parameters				
AT_c	Averaging time for carcinogens	days	25,550	OEHHA (2005), USEPA (2004, 2012a)
AT_{nc}	Averaging time for noncarcinogens	days	9,125	OEHHA (2005), USEPA (2012a)
ED	Exposure duration	yrs	25	OEHHA (2005), USEPA (2012a)
EF	Exposure frequency	days/yr	250	OEHHA (2005), USEPA (2012a)
ET	Exposure time	unitless	0.33	USEPA (2009, 2012a)
Building properties				
ER	Indoor air exchange rate	1/hr	1.5	USEPA (2011)
H_B	Enclosed space height	cm	244	USEPA (2004)
L_B	Enclosed space floor length	cm	1,000	DTSC (2011), USEPA (2004)
L_{crack}	Enclosed space floor thickness	cm	15	DTSC (2011), USEPA (2004)
L_F	Depth below grade to bottom of enclosed space floor	cm	15	DTSC (2011), USEPA (2004)
h	Crack-to-total area ratio	unitless	0.005	DTSC (2011)
Q_{soil}	Average vapor flow rate into building	L/min	5	DTSC (2011), USEPA (2004)
W_B	Enclosed space floor width	cm	1,000	DTSC (2011), USEPA (2004)
W_B	Floor-wall seam crack width	cm	0.1	USEPA (2004)
ΔP	Soil-building pressure differential	$g/cm\text{-}s^2$	40	DTSC (2011), USEPA (2004)
Soil properties				
L_s	Soil gas sampling depth	cm	152.4, 457.2	Soil gas samples collected at 5 and 15 ft bgs
T_S	Average soil temperature	°C	24	DTSC (2011)
NA	Stratum A SCS soil type	unitless	Sand	-
ρ_b	Soil dry bulk density	g/cm^3	1.66	USEPA (2004)
n	Soil total porosity	unitless	0.375	USEPA (2004)
qw	Soil water-filled porosity	unitless	0.054	USEPA (2004)

Table 5
Toxicity Values
DFSP Norwalk Site

Chemcial Name	IUR ($\mu g/m^3)^{-1}$	Reference	RfC (mg/m^3)	Reference
1,2,4-Trimethylbenzene	-	-	7.0E-03	PPRTV
1,2-Dichlorobenzene	-	-	2.0E-01	HEAST
1,2-Dichloroethane	2.1E-05	OEHHA	7.0E-03	PPRTV
1,3,5-Trimethylbenzene	-	-	7.0E-03	PPRTV; 1
1,3-Dichlorobenzene	-	-	3.5.E-03	IRIS;2,3
1,4-Dichlorobenzene	1.1E-05	OEHHA	8.0E-01	IRIS
2-Butanone	-	-	5.0E+00	IRIS
2-Hexanone	-	-	3.0E-02	IRIS
Acetone	-	-	3.1E+01	ATSDR
Benzene	2.9E-05	OEHHA	3.0E-02	IRIS
Bromodichloromethane	3.7E-05	OEHHA	7.0.E-02	IRIS;2
c-1,2-Dichloroethene	-	-	6.0E-02	PPRTV;4
Carbon Disulfide	-	-	7.0E-01	IRIS
Carbon Tetrachloride	4.2E-05	OEHHA	1.0E-01	IRIS
Chloroform	5.3E-06	OEHHA	9.8E-02	ATSDR
Chloromethane	-	-	9.0E-02	IRIS
Dichlorodifluoromethane	-	-	1.0E-01	PPRTVsv
Ethylbenzene	2.5E-06	OEHHA	1.0E+00	IRIS
Methylene Chloride	1.0E-06	OEHHA	6.0E-01	IRIS
o-Xylene	-	-	1.0E-01	IRIS
p/m-Xylene	-	-	1.0E-01	IRIS
Tert-Butyl Alcohol (TBA)	-	-	3.0E+01	PPRTV;5
Tetrachloroethene	5.9E-06	OEHHA	2.7E-01	ATSDR
Toluene	-	-	5.0E+00	IRIS
Trichloroethene	2.0E-06	OEHHA	2.0E-03	IRIS
Vinyl Acetate	-	-	2.0E-01	IRIS

Notes:

1 - No toxicity data available; 1,2,4-trimethylbenzene used as a surrogate.

2 - No inhalation toxicity data available; a route-to-route extrapolation from the oral route was applied.

3 - Draft value.

4 - No toxicity data available; trans-1,2-dichloroethene used as a surrogate.

5 - No toxicity data available; sec-butyl alchol used as a surrogate.

Definitions:

IUR ($\mu g/m^3)^{-1}$ = Inhalation unit risk, measured in per micrograms per cubit meter

RfC (mg/m^3) = Reference concentration, measured in milligrams per cubic meter

OEHHA = Office of Environmental Health Hazard Assessment, 2005, Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil.

Table 6

Commercial Worker Soil Gas Screening Levels

DFSP Norwalk Site

Chemical	5 feet bgs			15 feet bgs		
	Carcinogen (µg/m^3)	Noncarcinogen (µg/m^3)	Proposed Soil Gas Screening Level (µg/L)	Carcinogen (µg/m^3)	Noncarcinogen (µg/m^3)	Proposed Soil Gas Screening Level (µg/L)
1,2,4-Trimethylbenzene	-	8.11E+04	8.11E+01	-	1.78E+05	1.78E+02
1,2-Dichlorobenzene	-	2.17E+06	2.17E+03	-	4.60E+06	4.60E+03
1,2-Dichloroethane	1.20E+03	6.29E+04	1.20E+00	2.27E+03	1.19E+05	2.27E+00
1,3,5-Trimethylbenzene	-	8.14E+04	8.14E+01	-	1.79E+05	1.79E+02
1,3-Dichlorobenzene	-	3.78E+04	3.78E+01	-	8.03E+04	8.03E+01
1,4-Dichlorobenzene	2.76E+03	8.66E+06	2.76E+00	5.85E+03	1.84E+07	5.85E+00
2-Butanone (methyl ethyl ketone)	-	5.01E+07	5.01E+04	-	1.02E+08	1.02E+08
2-Hexanone	-	3.21E+05	3.21E+02	-	6.79E+05	6.79E+02
Acetone	-	2.59E+08	2.59E+05	-	4.68E+08	4.68E+05
Benzene	9.31E+02	2.89E+05	9.31E-01	1.85E+03	5.76E+05	1.85E+00
Bromodichloromethane	1.37E+03	1.26E+06	1.37E+00	3.50E+03	3.24E+06	3.50E+00
c-1,2-Dichloroethene	-	6.29E+05	6.29E+02	-	1.31E+06	1.31E+03
Carbon disulfide	-	6.29E+06	6.29E+03	-	1.19E+07	1.19E+04
Carbon tetrachloride	6.80E+02	1.02E+06	6.80E-01	1.40E+03	2.10E+06	1.40E+00
Chloroform	4.75E+03	8.77E+05	4.75E+00	9.01E+03	1.67E+06	9.01E+00
Chloromethane	-	7.51E+05	7.51E+02	-	1.35E+06	1.35E+03
Dichlorodifluoromethane (Freon 12)	-	1.10E+06	1.10E+03	-	2.37E+06	2.37E+03
Ethylbenzene	1.16E+04	1.04E+07	1.16E+01	2.42E+04	2.16E+07	2.42E+01
Methylene chloride	2.55E+04	5.45E+06	2.55E+01	4.87E+04	1.04E+07	4.87E+01
o-Xylene	-	9.69E+05	9.69E+02	-	1.93E+06	1.93E+03
p/m-Xylene	-	1.03E+06	1.03E+03	-	2.12E+06	2.12E+03
Tert-Butyl Alcohol (TBA)	-	2.90E+08	2.90E+05	-	5.79E+08	5.79E+05
Tetrachloroethene (PCE)	5.03E+03	2.88E+06	5.03E+00	1.06E+04	6.04E+06	1.06E+01
Toluene	-	4.85E+07	4.85E+04	-	9.67E+07	9.67E+04
Trichloroethene	1.42E+04	2.03E+04	1.42E+01	2.91E+04	4.15E+04	2.91E+01
Vinyl acetate	-	1.96E+06	1.96E+03	-	3.93E+06	3.93E+03

µg/m^3 = micrograms per cubic meter

µg/L = micrograms per liter

feet bgs = feet below ground surface

Screening levels in Appendix B were converted from µg/m3 to µg/L by dividing by 1000.

Figure

Legend

- Vapor Monitoring Probe

℄ EXCELSIOR DRIVE

℄ NORWALK BLVD

℄ CHESHIRE STREET

SERVICE ROAD

SERVICE ROAD

VMP-33 VMP-34 VMP-35 VMP-36 VMP-37 VMP-38

VMP-32

TANK 80001

TANK 80002

TANK 80004

TANK 80005

TANK 80006

TANK 80007

TANK 80008

TANK 80009

TANK 80013

TANK 55003

TANK 55004

TANK 80017

VMP-19 VMP-13 VMP-11 VMP-16 VMP-12 VMP-14 VMP-15 VMP-10

VMP-17 VMP-18

VMP-09 VMP-08 VMP-07 VMP-06 VMP-05

VMP-20 VMP-25 VMP-24 VMP-26 VMP-21 VMP-27 VMP-23 VMP-28 VMP-22

VMP-29 VMP-30 VMP-31

Holifield Park

OIL-WATER SEPARATOR

ADMINISTRATION BUILDING

LABORATORY BUILDING

TANK

TANK

SUMP

VMP-04

VMP-02 VMP-03 VMP-01

Manifold Pit

KMEP LEASE AREA

N

0 80 160 320 Feet

1 in = 160 feet

FIGURE 1

Vapor Monitoring Well Location Map

DEFENSE FUEL SUPPORT POINT
Norwalk, California

PARSONS

Pasadena, California

S:\ES\Ramon\DFSP\Norwalk\GIS\3Q10\VMP_Locations_11x17.mxd kh 2/7/2012

Appendices

Appendix A
Analytical Laboratory Reports

Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-09-1822

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Parsons, Inc.

Client Project Name: DFSP - Norwalk

Attention: Mary Lucas
100 West Walnut Street
Pasadena, CA 91124-0002

Ranjit K. K. Clarke

Approved for release on 10/5/2011 by:
Ranjit Clarke
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

Contents

Client Project Name: DFSP - Norwalk
Work Order Number: 11-09-1822

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-5-092611	**11-09-1822-1-A**	**09/26/11 09:20**	**Air**	**GC/MS K**	**N/A**	**09/29/11 03:57**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.023	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	0.0025	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.013	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.014	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	0.0033	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	0.0031	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0070	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0031	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0060	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.36	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	98	47-137		
Toluene-d8	99	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Return to Contents

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-15-092611	**11-09-1822-2-A**	**09/26/11 09:30**	**Air**	**GC/MS K**	**N/A**	**09/29/11 04:48**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.016	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.015	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	0.14	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0036	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-5-092611	**11-09-1822-3-A**	**09/26/11 09:35**	**Air**	**GC/MS K**	**N/A**	**09/29/11 05:38**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.011	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0058	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.011	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0024	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0023	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-15-092611	**11-09-1822-4-A**	**09/26/11 10:25**	**Air**	**GC/MS K**	**N/A**	**09/29/11 06:29**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.017	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0051	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.011	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0041	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	0.0046	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	0.0030	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-5-092611	**11-09-1822-5-A**	**09/26/11 10:40**	**Air**	**GC/MS K**	**N/A**	**09/29/11 07:20**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.022	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.011	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0069	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0087	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	0.010	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0023	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15-092611	**11-09-1822-6-A**	**09/26/11 11:30**	**Air**	**GC/MS K**	**N/A**	**09/29/11 08:12**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.024	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0075	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0022	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	0.0045	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.013	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	99	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-5-092611	**11-09-1822-7-A**	**09/26/11 11:40**	**Air**	**GC/MS K**	**N/A**	**09/29/11 16:36**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.023	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0096	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0085	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0032	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	0.0059	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	98	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-15-092611	**11-09-1822-8-A**	**09/26/11 12:50**	**Air**	**GC/MS K**	**N/A**	**09/29/11 17:30**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.089	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	0.0020	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.014	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.031	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0065	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	0.0057	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	0.013	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.014	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	0.0049	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	98	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-5-092611	**11-09-1822-9-A**	**09/26/11 13:50**	**Air**	**GC/MS K**	**N/A**	**09/29/11 18:25**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.055	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.011	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.023	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0024	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-15-092611	**11-09-1822-10-A**	**09/26/11 14:35**	**Air**	**GC/MS K**	**N/A**	**09/29/11 21:43**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.083	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.014	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.014	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0044	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	0.0038	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-5-092611	**11-09-1822-11-A**	**09/26/11 14:00**	**Air**	**GC/MS K**	**N/A**	**09/29/11 22:35**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.046	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0059	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.011	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0034	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	98	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-092611	**11-09-1822-12-A**	**09/26/11 14:55**	**Air**	**GC/MS K**	**N/A**	**09/29/11 23:26**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.091	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.015	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.010	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0041	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0028	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.028	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	100	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-092611 DUP	**11-09-1822-13-A**	**09/26/11 14:56**	**Air**	**GC/MS YY**	**N/A**	**09/30/11 15:37**	**110930L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.041	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0080	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0016	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.012	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	101	57-129			1,2-Dichloroethane-d4	105	47-137		
Toluene-d8	97	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-5-092611	**11-09-1822-14-A**	**09/26/11 14:10**	**Air**	**GC/MS K**	**N/A**	**09/30/11 03:41**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.089	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.019	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.023	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0091	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.026	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-15-092611	**11-09-1822-15-A**	**09/26/11 15:10**	**Air**	**GC/MS K**	**N/A**	**09/30/11 04:33**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.11	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.014	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0089	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0022	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	0.013	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5-092711	**11-09-1822-16-A**	**09/27/11 10:20**	**Air**	**GC/MS K**	**N/A**	**09/30/11 05:25**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.026	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	0.0022	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.013	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.014	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	0.0025	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	0.011	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0047	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0061	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	99	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15-092711	**11-09-1822-17-A**	**09/27/11 11:10**	**Air**	**GC/MS K**	**N/A**	**09/30/11 06:18**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.040	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0097	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.022	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	0.0030	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0084	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	0.0042	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0029	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	100	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5-092711	**11-09-1822-18-A**	**09/27/11 11:20**	**Air**	**GC/MS K**	**N/A**	**09/30/11 07:10**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.054	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.017	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0034	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0025	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0044	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	100	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15-092711	**11-09-1822-19-A**	**09/27/11 13:15**	**Air**	**GC/MS K**	**N/A**	**09/30/11 08:03**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.080	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.017	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.022	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0048	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0020	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.26	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5-092711	**11-09-1822-20-A**	**09/27/11 11:35**	**Air**	**GC/MS YY**	**N/A**	**09/30/11 17:18**	**110930L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.042	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	0.0027	0.0022	1	
Bromodichloromethane	0.0043	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.010	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.017	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	0.0068	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	0.065	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.011	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0025	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	112	57-129			1,2-Dichloroethane-d4	101	47-137		
Toluene-d8	86	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15-092711	**11-09-1822-21-A**	**09/27/11 13:30**	**Air**	**GC/MS YY**	**N/A**	**09/30/11 18:11**	**110930L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.11	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	0.0030	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.033	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.014	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	0.0067	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	0.039	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0074	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0033	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.022	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroethane-d4	102	47-137		
Toluene-d8	92	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-Field Blank-092711	**11-09-1822-22-A**	**09/27/11 13:35**	**Air**	**GC/MS YY**	**N/A**	**09/30/11 19:03**	**110930L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.078	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	0.0023	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0078	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0015	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0033	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0080	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroethane-d4	103	47-137		
Toluene-d8	92	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-9,367**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**09/30/11 14:10**	**110930L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	101	57-129			1,2-Dichloroethane-d4	106	47-137		
Toluene-d8	97	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-9,368**	**N/A**	**Air**	**GC/MS K**	**N/A**	**09/28/11 13:10**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-9,375**	**N/A**	**Air**	**GC/MS K**	**N/A**	**09/29/11 14:55**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	100	57-129			1,2-Dichloroethane-d4	101	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M
		Units:	%V

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-5-092611	**11-09-1822-1-A**	**09/26/11 09:20**	**Air**	**GC 34**	**N/A**	**09/28/11 16:51**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Nitrogen	78	0.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-15-092611	**11-09-1822-2-A**	**09/26/11 09:30**	**Air**	**GC 34**	**N/A**	**09/28/11 17:30**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	7.9	0.50	1		Carbon Dioxide	13	0.50	1	
Nitrogen	79	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-5-092611	**11-09-1822-3-A**	**09/26/11 09:35**	**Air**	**GC 34**	**N/A**	**09/28/11 18:07**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	1.4	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-15-092611	**11-09-1822-4-A**	**09/26/11 10:25**	**Air**	**GC 34**	**N/A**	**09/28/11 18:42**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	20	0.50	1		Carbon Dioxide	2.1	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-5-092611	**11-09-1822-5-A**	**09/26/11 10:40**	**Air**	**GC 34**	**N/A**	**09/28/11 19:14**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	0.95	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15-092611	**11-09-1822-6-A**	**09/26/11 11:30**	**Air**	**GC 34**	**N/A**	**09/28/11 19:47**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	20	0.50	1		Carbon Dioxide	2.8	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-5-092611	**11-09-1822-7-A**	**09/26/11 11:40**	**Air**	**GC 34**	**N/A**	**09/28/11 20:27**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Nitrogen	78	0.50	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/28/11
100 West Walnut Street	Work Order No: 11-09-1822
Pasadena, CA 91124-0002	Preparation: N/A
	Method: SCAQMD 25.1M
	Units: %V

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-15-092611	**11-09-1822-8-A**	**09/26/11 12:50**	**Air**	**GC 34**	**N/A**	**09/28/11 21:04**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	1.6	0.50	1	
Nitrogen	77	0.50	1						

VMP-36-5-092611	**11-09-1822-9-A**	**09/26/11 13:50**	**Air**	**GC 34**	**N/A**	**09/28/11 21:37**	**110928L01**		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	0.61	0.50	1	
Nitrogen	78	0.50	1						

VMP-36-15-092611	**11-09-1822-10-A**	**09/26/11 14:35**	**Air**	**GC 36**	**N/A**	**09/28/11 22:05**	**110928L01**		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	20	0.50	1		Carbon Dioxide	2.8	0.50	1	
Nitrogen	78	0.50	1						

VMP-37-5-092611	**11-09-1822-11-A**	**09/26/11 14:00**	**Air**	**GC 36**	**N/A**	**09/28/11 21:41**	**110928L01**		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	1.1	0.50	1	
Nitrogen	77	0.50	1						

VMP-37-15-092611	**11-09-1822-12-A**	**09/26/11 14:55**	**Air**	**GC 36**	**N/A**	**09/28/11 21:14**	**110928L01**		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	1.4	0.50	1	
Nitrogen	77	0.50	1						

VMP-37-15-092611 DUP	**11-09-1822-13-A**	**09/26/11 14:56**	**Air**	**GC 36**	**N/A**	**09/28/11 20:46**	**110928L01**		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	1.4	0.50	1	
Nitrogen	77	0.50	1						

VMP-38-5-092611	**11-09-1822-14-A**	**09/26/11 14:10**	**Air**	**GC 36**	**N/A**	**09/28/11 20:18**	**110928L01**		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	0.82	0.50	1	
Nitrogen	78	0.50	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M
		Units:	%V

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-15-092611	**11-09-1822-15-A**	**09/26/11 15:10**	**Air**	**GC 36**	**N/A**	**09/28/11 19:49**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	16	0.50	1		Carbon Dioxide	5.9	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5-092711	**11-09-1822-16-A**	**09/27/11 10:20**	**Air**	**GC 36**	**N/A**	**09/28/11 19:17**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	19	0.50	1		Carbon Dioxide	3.4	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15-092711	**11-09-1822-17-A**	**09/27/11 11:10**	**Air**	**GC 36**	**N/A**	**09/28/11 19:00**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	19	0.50	1		Carbon Dioxide	3.2	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5-092711	**11-09-1822-18-A**	**09/27/11 11:20**	**Air**	**GC 36**	**N/A**	**09/28/11 18:41**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	17	0.50	1		Carbon Dioxide	5.8	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15-092711	**11-09-1822-19-A**	**09/27/11 13:15**	**Air**	**GC 36**	**N/A**	**09/28/11 18:24**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	18	0.50	1		Carbon Dioxide	5.5	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5-092711	**11-09-1822-20-A**	**09/27/11 11:35**	**Air**	**GC 36**	**N/A**	**09/28/11 18:07**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	17	0.50	1		Carbon Dioxide	5.6	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15-092711	**11-09-1822-21-A**	**09/27/11 13:30**	**Air**	**GC 36**	**N/A**	**09/28/11 17:47**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	18	0.50	1		Carbon Dioxide	5.4	0.50	1	
Nitrogen	77	0.50	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M
		Units:	%V

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-Field Blank-092711	**11-09-1822-22-A**	**09/27/11 13:35**	**Air**	**GC 36**	**N/A**	**09/28/11 17:27**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Nitrogen	78	0.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-192-478**	**N/A**	**Air**	**GC 34**	**N/A**	**09/28/11 10:45**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	ND	0.50	1		Carbon Monoxide	ND	0.50	1	
Nitrogen	ND	0.50	1		Carbon Dioxide	ND	0.50	1	
Methane	ND	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-192-479**	**N/A**	**Air**	**GC 36**	**N/A**	**09/28/11 10:00**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	ND	0.50	1		Carbon Monoxide	ND	0.50	1	
Nitrogen	ND	0.50	1		Carbon Dioxide	ND	0.50	1	
Methane	ND	0.50	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/28/11
100 West Walnut Street	Work Order No: 11-09-1822
Pasadena, CA 91124-0002	Preparation: N/A
	Method: SCAQMD 25.1M
	Units: ppm (v/v)
Project: DFSP - Norwalk	Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-5-092611	**11-09-1822-1-A**	**09/26/11 09:20**	**Air**	**GC 14**	**N/A**	**09/28/11 23:07**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	16	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	760	1.0	1		TGNMO	ND	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-15-092611	**11-09-1822-2-A**	**09/26/11 09:30**	**Air**	**GC 14**	**N/A**	**09/28/11 23:29**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-5-092611	**11-09-1822-3-A**	**09/26/11 09:35**	**Air**	**GC 14**	**N/A**	**09/29/11 00:36**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-15-092611	**11-09-1822-4-A**	**09/26/11 10:25**	**Air**	**GC 14**	**N/A**	**09/29/11 00:58**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-5-092611	**11-09-1822-5-A**	**09/26/11 10:40**	**Air**	**GC 14**	**N/A**	**09/29/11 01:48**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15-092611	**11-09-1822-6-A**	**09/26/11 11:30**	**Air**	**GC 14**	**N/A**	**09/29/11 02:40**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-5-092611	**11-09-1822-7-A**	**09/26/11 11:40**	**Air**	**GC 14**	**N/A**	**09/29/11 03:00**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	4500	1.0	1		TGNMO	5.4	5.0	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/28/11
100 West Walnut Street	Work Order No: 11-09-1822
Pasadena, CA 91124-0002	Preparation: N/A
	Method: SCAQMD 25.1M
	Units: ppm (v/v)

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-15-092611	**11-09-1822-8-A**	**09/26/11 12:50**	**Air**	**GC 14**	**N/A**	**09/29/11 03:27**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-5-092611	**11-09-1822-9-A**	**09/26/11 13:50**	**Air**	**GC 14**	**N/A**	**09/29/11 03:52**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-15-092611	**11-09-1822-10-A**	**09/26/11 14:35**	**Air**	**GC 14**	**N/A**	**09/29/11 04:34**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-5-092611	**11-09-1822-11-A**	**09/26/11 14:00**	**Air**	**GC 14**	**N/A**	**09/29/11 05:08**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	5.1	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-092611	**11-09-1822-12-A**	**09/26/11 14:55**	**Air**	**GC 14**	**N/A**	**09/29/11 05:31**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	5.1	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-092611 DUP	**11-09-1822-13-A**	**09/26/11 14:56**	**Air**	**GC 14**	**N/A**	**09/29/11 11:00**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-5-092611	**11-09-1822-14-A**	**09/26/11 14:10**	**Air**	**GC 14**	**N/A**	**09/29/11 11:19**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.	Date Received: 09/28/11
100 West Walnut Street	Work Order No: 11-09-1822
Pasadena, CA 91124-0002	Preparation: N/A
	Method: SCAQMD 25.1M
	Units: ppm (v/v)

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-15-092611	**11-09-1822-15-A**	**09/26/11 15:10**	**Air**	**GC 14**	**N/A**	**09/29/11 11:49**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5-092711	**11-09-1822-16-A**	**09/27/11 10:20**	**Air**	**GC 14**	**N/A**	**09/29/11 12:42**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15-092711	**11-09-1822-17-A**	**09/27/11 11:10**	**Air**	**GC 14**	**N/A**	**09/29/11 13:26**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5-092711	**11-09-1822-18-A**	**09/27/11 11:20**	**Air**	**GC 14**	**N/A**	**09/29/11 14:12**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15-092711	**11-09-1822-19-A**	**09/27/11 13:15**	**Air**	**GC 14**	**N/A**	**09/29/11 14:31**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5-092711	**11-09-1822-20-A**	**09/27/11 11:35**	**Air**	**GC 14**	**N/A**	**09/29/11 14:53**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15-092711	**11-09-1822-21-A**	**09/27/11 13:30**	**Air**	**GC 14**	**N/A**	**09/29/11 15:12**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons, Inc.		Date Received:	09/28/11
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M
		Units:	ppm (v/v)

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-Field Blank-092711	**11-09-1822-22-A**	**09/27/11 13:35**	**Air**	**GC 14**	**N/A**	**09/29/11 15:35**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	2.4	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	450	1.0	1		TGNMO	ND	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-194-536**	**N/A**	**Air**	**GC 14**	**N/A**	**09/28/11 16:37**	**110928L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	ND	1.0	1		TGNMO	ND	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-194-537**	**N/A**	**Air**	**GC 14**	**N/A**	**09/28/11 10:23**	**110929L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	ND	1.0	1		TGNMO	ND	5.0	1	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,368	**Air**	**GC/MS K**	**N/A**	**09/28/11**	**110928L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acetone	0.05939	79	84	50-150	33-167	6	0-35	
Benzene	0.07987	89	89	60-156	44-172	0	0-40	
Benzyl Chloride	0.1294	90	92	50-150	33-167	3	0-35	
Bromodichloromethane	0.1675	89	90	50-150	33-167	1	0-35	
Bromoform	0.2584	93	93	62-134	50-146	0	0-38	
Bromomethane	0.09708	85	87	50-150	33-167	2	0-35	
1,3-Butadiene	0.05531	84	85	50-150	33-167	2	0-35	
2-Butanone	0.07373	85	86	50-150	33-167	1	0-35	
Carbon Disulfide	0.07785	111	110	50-150	33-167	1	0-35	
Carbon Tetrachloride	0.1573	87	87	64-154	49-169	0	0-32	
Chlorobenzene	0.1151	92	92	50-150	33-167	0	0-35	
Chloroethane	0.06596	86	89	50-150	33-167	3	0-35	
Chloroform	0.1221	88	88	50-150	33-167	0	0-35	
Chloromethane	0.05163	83	84	50-150	33-167	2	0-35	
Cyclohexane	0.08605	86	87	50-150	33-167	2	0-35	
Dibromochloromethane	0.2130	89	89	50-150	33-167	0	0-35	
Dichlorodifluoromethane	0.1236	83	85	50-150	33-167	3	0-35	
Diisopropyl Ether (DIPE)	0.1045	78	78	50-150	33-167	0	0-35	
1,1-Dichloroethane	0.1012	87	88	50-150	33-167	0	0-35	
1,1-Dichloroethene	0.09912	83	83	50-150	33-167	0	0-35	
1,2-Dibromoethane	0.1921	92	91	54-144	39-159	1	0-36	
Dichlorotetrafluoroethane	0.1748	83	85	50-150	33-167	2	0-35	
1,2-Dichlorobenzene	0.1503	93	93	34-160	13-181	0	0-47	
1,2-Dichloroethane	0.1012	89	89	69-153	55-167	0	0-35	
1,2-Dichloropropane	0.1155	91	91	67-157	52-172	1	0-35	
1,3-Dichlorobenzene	0.1503	94	94	50-150	33-167	0	0-35	
1,4-Dichlorobenzene	0.1503	93	93	36-156	16-176	0	0-47	
1,4-Dioxane	0.09009	92	90	50-150	33-167	2	0-35	
c-1,3-Dichloropropene	0.1135	94	96	61-157	45-173	1	0-35	
c-1,2-Dichloroethene	0.09912	89	89	50-150	33-167	0	0-35	
t-1,2-Dichloroethene	0.09912	89	89	50-150	33-167	0	0-35	
t-1,3-Dichloropropene	0.1135	98	99	50-150	33-167	1	0-35	
Ethanol	0.1884	80	79	50-150	33-167	0	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,368	**Air**	**GC/MS K**	**N/A**	**09/28/11**	**110928L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Ethyl Acetate	0.09009	94	93	50-150	33-167	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	0.1045	89	91	50-150	33-167	1	0-35	
Ethylbenzene	0.1086	94	93	52-154	35-171	1	0-38	
4-Ethyltoluene	0.1229	94	94	50-150	33-167	0	0-35	
Heptane	0.1025	91	92	50-150	33-167	1	0-35	
Hexachloro-1,3-Butadiene	0.2666	111	111	50-150	33-167	0	0-35	
Hexane	0.08812	84	84	50-150	33-167	0	0-35	
2-Hexanone	0.1024	92	92	50-150	33-167	0	0-35	
Methyl-t-Butyl Ether (MTBE)	0.09013	88	95	50-150	33-167	8	0-35	
Methylene Chloride	0.08684	81	82	50-150	33-167	1	0-35	
4-Methyl-2-Pentanone	0.1024	92	93	50-150	33-167	1	0-35	
Naphthalene	0.1311	106	104	40-190	15-215	2	0-35	
o-Xylene	0.1086	93	92	52-148	36-164	1	0-38	
p/m-Xylene	0.2171	93	93	42-156	23-175	0	0-41	
Propene	0.04303	86	86	50-150	33-167	0	0-35	
Styrene	0.1065	95	95	50-150	33-167	1	0-35	
Tert-Amyl-Methyl Ether (TAME)	0.1045	90	91	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	84	85	50-150	33-167	1	0-35	
Tetrachloroethene	0.1696	93	93	56-152	40-168	0	0-40	
Tetrahydrofuran	0.07373	87	87	50-150	33-167	0	0-35	
Toluene	0.09421	90	89	56-146	41-161	0	0-43	
Trichloroethene	0.1343	90	90	63-159	47-175	1	0-34	
Trichlorofluoromethane	0.1405	83	85	50-150	33-167	2	0-35	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	113	112	50-150	33-167	1	0-35	
1,1,1-Trichloroethane	0.1364	90	90	50-150	33-167	0	0-35	
1,1,2-Trichloroethane	0.1364	94	94	65-149	51-163	0	0-37	
1,2,3-Trichloropropane	0.1507	90	90	50-150	33-167	0	0-35	
Acrolein	0.05732	82	86	50-150	33-167	4	0-35	
Acrylonitrile	0.05425	82	84	50-150	33-167	2	0-35	
Methyl Methacrylate	0.1024	95	95	50-150	33-167	0	0-35	
Propane	0.09018	86	86	50-150	33-167	0	0-35	
Butane	0.1189	75	77	50-150	33-167	2	0-35	
Methanol	0.09828	79	80	50-150	33-167	1	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,368	**Air**	**GC/MS K**	**N/A**	**09/28/11**	**110928L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,2,4-Trimethyl Pentane	0.1168	87	88	50-150	33-167	1	0-35	
Isobutane	0.1189	83	84	50-150	33-167	2	0-35	
1,1,1,2-Tetrafluoroethane	0.1043	86	87	50-150	33-167	1	0-35	
1,3,5-Trimethylbenzene	0.1229	93	93	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	0.1716	92	92	50-150	33-167	0	0-35	
1,2,4-Trimethylbenzene	0.1229	92	91	50-150	33-167	0	0-35	
1,2,4-Trichlorobenzene	0.1855	113	112	50-150	33-167	1	0-35	
Vinyl Acetate	0.08803	76	83	50-150	33-167	8	0-35	
Vinyl Chloride	0.06391	84	85	45-177	23-199	1	0-36	
1,1-Difluoroethane	0.06754	84	85	50-150	33-167	1	0-35	
Isopropanol	0.06145	83	83	50-150	33-167	0	0-35	
2-Chlorotoluene	0.1294	92	92	50-150	33-167	0	0-35	

Total number of LCS compounds : 78
Total number of ME compounds : 0
Total number of ME compounds allowed : 4
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,375	**Air**	**GC/MS K**	**N/A**	**09/29/11**	**110929L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acetone	0.05939	88	91	50-150	33-167	3	0-35	
Benzene	0.07987	90	91	60-156	44-172	1	0-40	
Benzyl Chloride	0.1294	105	106	50-150	33-167	1	0-35	
Bromodichloromethane	0.1675	93	94	50-150	33-167	1	0-35	
Bromoform	0.2584	98	98	62-134	50-146	0	0-38	
Bromomethane	0.09708	91	92	50-150	33-167	1	0-35	
1,3-Butadiene	0.05531	91	93	50-150	33-167	2	0-35	
2-Butanone	0.07373	89	90	50-150	33-167	1	0-35	
Carbon Disulfide	0.07785	115	114	50-150	33-167	1	0-35	
Carbon Tetrachloride	0.1573	92	93	64-154	49-169	0	0-32	
Chlorobenzene	0.1151	94	94	50-150	33-167	0	0-35	
Chloroethane	0.06596	94	98	50-150	33-167	4	0-35	
Chloroform	0.1221	91	91	50-150	33-167	1	0-35	
Chloromethane	0.05163	91	93	50-150	33-167	1	0-35	
Cyclohexane	0.08605	90	90	50-150	33-167	1	0-35	
Dibromochloromethane	0.2130	94	93	50-150	33-167	1	0-35	
Dichlorodifluoromethane	0.1236	111	123	50-150	33-167	10	0-35	
Diisopropyl Ether (DIPE)	0.1045	82	82	50-150	33-167	1	0-35	
1,1-Dichloroethane	0.1012	90	91	50-150	33-167	1	0-35	
1,1-Dichloroethene	0.09912	90	92	50-150	33-167	3	0-35	
1,2-Dibromoethane	0.1921	94	94	54-144	39-159	0	0-36	
Dichlorotetrafluoroethane	0.1748	89	91	50-150	33-167	2	0-35	
1,2-Dichlorobenzene	0.1503	94	94	34-160	13-181	0	0-47	
1,2-Dichloroethane	0.1012	92	93	69-153	55-167	1	0-35	
1,2-Dichloropropane	0.1155	93	94	67-157	52-172	0	0-35	
1,3-Dichlorobenzene	0.1503	97	97	50-150	33-167	0	0-35	
1,4-Dichlorobenzene	0.1503	95	96	36-156	16-176	0	0-47	
1,4-Dioxane	0.09009	93	94	50-150	33-167	1	0-35	
c-1,3-Dichloropropene	0.1135	99	99	61-157	45-173	1	0-35	
c-1,2-Dichloroethene	0.09912	90	91	50-150	33-167	1	0-35	
t-1,2-Dichloroethene	0.09912	90	91	50-150	33-167	1	0-35	
t-1,3-Dichloropropene	0.1135	104	104	50-150	33-167	0	0-35	
Ethanol	0.1884	87	88	50-150	33-167	2	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,375	**Air**	**GC/MS K**	**N/A**	**09/29/11**	**110929L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Ethyl Acetate	0.09009	94	95	50-150	33-167	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	0.1045	80	84	50-150	33-167	5	0-35	
Ethylbenzene	0.1086	95	95	52-154	35-171	0	0-38	
4-Ethyltoluene	0.1229	96	97	50-150	33-167	0	0-35	
Heptane	0.1025	92	94	50-150	33-167	2	0-35	
Hexachloro-1,3-Butadiene	0.2666	108	109	50-150	33-167	0	0-35	
Hexane	0.08812	88	89	50-150	33-167	1	0-35	
2-Hexanone	0.1024	94	93	50-150	33-167	1	0-35	
Methyl-t-Butyl Ether (MTBE)	0.09013	84	88	50-150	33-167	5	0-35	
Methylene Chloride	0.08684	87	87	50-150	33-167	1	0-35	
4-Methyl-2-Pentanone	0.1024	95	96	50-150	33-167	1	0-35	
Naphthalene	0.1311	98	100	40-190	15-215	2	0-35	
o-Xylene	0.1086	95	95	52-148	36-164	0	0-38	
p/m-Xylene	0.2171	96	96	42-156	23-175	0	0-41	
Propene	0.04303	95	99	50-150	33-167	5	0-35	
Styrene	0.1065	96	96	50-150	33-167	0	0-35	
Tert-Amyl-Methyl Ether (TAME)	0.1045	76	80	50-150	33-167	5	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	80	83	50-150	33-167	4	0-35	
Tetrachloroethene	0.1696	94	94	56-152	40-168	0	0-40	
Tetrahydrofuran	0.07373	90	91	50-150	33-167	1	0-35	
Toluene	0.09421	92	91	56-146	41-161	0	0-43	
Trichloroethene	0.1343	92	93	63-159	47-175	0	0-34	
Trichlorofluoromethane	0.1405	88	91	50-150	33-167	4	0-35	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	117	116	50-150	33-167	1	0-35	
1,1,1-Trichloroethane	0.1364	92	93	50-150	33-167	1	0-35	
1,1,2-Trichloroethane	0.1364	96	97	65-149	51-163	1	0-37	
1,2,3-Trichloropropane	0.1507	92	92	50-150	33-167	0	0-35	
Acrolein	0.05732	90	92	50-150	33-167	3	0-35	
Acrylonitrile	0.05425	89	91	50-150	33-167	2	0-35	
Methyl Methacrylate	0.1024	97	97	50-150	33-167	1	0-35	
Propane	0.09018	104	114	50-150	33-167	9	0-35	
Butane	0.1189	81	84	50-150	33-167	3	0-35	
Methanol	0.09828	81	90	50-150	33-167	10	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,375	**Air**	**GC/MS K**	**N/A**	**09/29/11**	**110929L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,2,4-Trimethyl Pentane	0.1168	92	92	50-150	33-167	0	0-35	
Isobutane	0.1189	90	93	50-150	33-167	3	0-35	
1,1,1,2-Tetrafluoroethane	0.1043	89	91	50-150	33-167	1	0-35	
1,3,5-Trimethylbenzene	0.1229	95	94	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	0.1716	96	95	50-150	33-167	1	0-35	
1,2,4-Trimethylbenzene	0.1229	93	94	50-150	33-167	0	0-35	
1,2,4-Trichlorobenzene	0.1855	103	104	50-150	33-167	1	0-35	
Vinyl Acetate	0.08803	84	89	50-150	33-167	6	0-35	
Vinyl Chloride	0.06391	91	93	45-177	23-199	2	0-36	
1,1-Difluoroethane	0.06754	89	91	50-150	33-167	2	0-35	
Isopropanol	0.06145	89	92	50-150	33-167	4	0-35	
2-Chlorotoluene	0.1294	94	94	50-150	33-167	0	0-35	

Total number of LCS compounds : 78
Total number of ME compounds : 0
Total number of ME compounds allowed : 4
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,367	**Air**	**GC/MS YY**	**N/A**	**09/30/11**	**110930L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acetone	0.05939	111	113	50-150	33-167	1	0-35	
Benzene	0.07987	101	101	60-156	44-172	1	0-40	
Benzyl Chloride	0.1294	108	108	50-150	33-167	0	0-35	
Bromodichloromethane	0.1675	100	101	50-150	33-167	1	0-35	
Bromoform	0.2584	94	94	62-134	50-146	0	0-38	
Bromomethane	0.09708	102	102	50-150	33-167	0	0-35	
1,3-Butadiene	0.05531	116	117	50-150	33-167	0	0-35	
2-Butanone	0.07373	135	136	50-150	33-167	1	0-35	
Carbon Disulfide	0.07785	103	103	50-150	33-167	0	0-35	
Carbon Tetrachloride	0.1573	106	106	64-154	49-169	0	0-32	
Chlorobenzene	0.1151	101	102	50-150	33-167	1	0-35	
Chloroethane	0.06596	117	118	50-150	33-167	1	0-35	
Chloroform	0.1221	99	99	50-150	33-167	0	0-35	
Chloromethane	0.05163	124	125	50-150	33-167	1	0-35	
Cyclohexane	0.08605	119	119	50-150	33-167	0	0-35	
Dibromochloromethane	0.2130	104	105	50-150	33-167	0	0-35	
Dichlorodifluoromethane	0.1236	99	99	50-150	33-167	0	0-35	
Diisopropyl Ether (DIPE)	0.1045	114	114	50-150	33-167	0	0-35	
1,1-Dichloroethane	0.1012	108	108	50-150	33-167	1	0-35	
1,1-Dichloroethene	0.09912	110	110	50-150	33-167	0	0-35	
1,2-Dibromoethane	0.1921	101	101	54-144	39-159	1	0-36	
Dichlorotetrafluoroethane	0.1748	99	100	50-150	33-167	0	0-35	
1,2-Dichlorobenzene	0.1503	89	88	34-160	13-181	0	0-47	
1,2-Dichloroethane	0.1012	110	110	69-153	55-167	0	0-35	
1,2-Dichloropropane	0.1155	109	110	67-157	52-172	1	0-35	
1,3-Dichlorobenzene	0.1503	91	91	50-150	33-167	0	0-35	
1,4-Dichlorobenzene	0.1503	90	90	36-156	16-176	0	0-47	
1,4-Dioxane	0.09009	99	100	50-150	33-167	1	0-35	
c-1,3-Dichloropropene	0.1135	110	111	61-157	45-173	1	0-35	
c-1,2-Dichloroethene	0.09912	102	103	50-150	33-167	1	0-35	
t-1,2-Dichloroethene	0.09912	99	99	50-150	33-167	1	0-35	
t-1,3-Dichloropropene	0.1135	119	120	50-150	33-167	1	0-35	
Ethanol	0.1884	139	140	50-150	33-167	0	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,367	**Air**	**GC/MS YY**	**N/A**	**09/30/11**	**110930L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Ethyl Acetate	0.09009	109	111	50-150	33-167	2	0-35	
Ethyl-t-Butyl Ether (ETBE)	0.1045	116	117	50-150	33-167	2	0-35	
Ethylbenzene	0.1086	105	105	52-154	35-171	0	0-38	
4-Ethyltoluene	0.1229	103	103	50-150	33-167	0	0-35	
Heptane	0.1025	102	103	50-150	33-167	1	0-35	
Hexachloro-1,3-Butadiene	0.2666	76	76	50-150	33-167	0	0-35	
Hexane	0.08812	122	122	50-150	33-167	0	0-35	
2-Hexanone	0.1024	120	121	50-150	33-167	0	0-35	
Methyl-t-Butyl Ether (MTBE)	0.09013	104	106	50-150	33-167	2	0-35	
Methylene Chloride	0.08684	94	94	50-150	33-167	0	0-35	
4-Methyl-2-Pentanone	0.1024	121	122	50-150	33-167	1	0-35	
Naphthalene	0.1311	87	87	40-190	15-215	1	0-35	
o-Xylene	0.1086	104	104	52-148	36-164	0	0-38	
p/m-Xylene	0.2171	104	105	42-156	23-175	1	0-41	
Propene	0.04303	138	142	50-150	33-167	3	0-35	
Styrene	0.1065	98	98	50-150	33-167	1	0-35	
Tert-Amyl-Methyl Ether (TAME)	0.1045	103	104	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	113	114	50-150	33-167	0	0-35	
Tetrachloroethene	0.1696	89	89	56-152	40-168	1	0-40	
Tetrahydrofuran	0.07373	138	140	50-150	33-167	1	0-35	
Toluene	0.09421	102	103	56-146	41-161	1	0-43	
Trichloroethene	0.1343	102	103	63-159	47-175	1	0-34	
Trichlorofluoromethane	0.1405	95	95	50-150	33-167	0	0-35	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	105	105	50-150	33-167	0	0-35	
1,1,1-Trichloroethane	0.1364	104	104	50-150	33-167	0	0-35	
1,1,2-Trichloroethane	0.1364	102	103	65-149	51-163	1	0-37	
1,2,3-Trichloropropane	0.1507	97	98	50-150	33-167	0	0-35	
Acrolein	0.05732	109	109	50-150	33-167	0	0-35	
Acrylonitrile	0.05425	68	64	50-150	33-167	6	0-35	
Methyl Methacrylate	0.1024	109	111	50-150	33-167	1	0-35	
Propane	0.09018	121	128	50-150	33-167	5	0-35	
Butane	0.1189	110	111	50-150	33-167	1	0-35	
Methanol	0.09828	232	233	50-150	33-167	1	0-35	X

RPD - Relative Percent Difference , CL - Control Limit

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,367	**Air**	**GC/MS YY**	**N/A**	**09/30/11**	**110930L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,2,4-Trimethyl Pentane	0.1168	113	114	50-150	33-167	1	0-35	
Isobutane	0.1189	109	110	50-150	33-167	1	0-35	
1,1,1,2-Tetrafluoroethane	0.1043	103	104	50-150	33-167	0	0-35	
1,3,5-Trimethylbenzene	0.1229	99	99	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	0.1716	99	99	50-150	33-167	0	0-35	
1,2,4-Trimethylbenzene	0.1229	98	97	50-150	33-167	1	0-35	
1,2,4-Trichlorobenzene	0.1855	75	75	50-150	33-167	1	0-35	
Vinyl Acetate	0.08803	118	119	50-150	33-167	1	0-35	
Vinyl Chloride	0.06391	114	114	45-177	23-199	0	0-36	
1,1-Difluoroethane	0.06754	124	124	50-150	33-167	0	0-35	
Isopropanol	0.06145	101	102	50-150	33-167	1	0-35	
2-Chlorotoluene	0.1294	98	98	50-150	33-167	0	0-35	

Total number of LCS compounds : 78
Total number of ME compounds : 0
Total number of ME compounds allowed : 4
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: SCAQMD 25.1M

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-192-478	**Air**	**GC 34**	**N/A**	**09/28/11**	**110928L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oxygen + Argon	3.500	98	98	80-120	0	0-20	
Nitrogen	10.02	99	99	80-120	0	0-20	
Carbon Dioxide	10.07	105	105	80-120	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: SCAQMD 25.1M

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-192-479	**Air**	**GC 36**	**N/A**	**09/28/11**	**110928L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oxygen + Argon	3.500	95	93	80-120	3	0-20	
Nitrogen	10.02	97	94	80-120	3	0-20	
Carbon Dioxide	10.07	105	102	80-120	3	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-09-1822
Preparation: N/A
Method: SCAQMD 25.1M

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-194-536	**Air**	**GC 14**	**N/A**	**09/28/11**	**110928L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	100.0	102	102	80-120	0	0-20	
Carbon Dioxide	102.0	101	102	80-120	0	0-20	
Carbon Monoxide	101.0	105	106	80-120	0	0-20	
TGNMO	306.0	101	101	80-120	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-09-1822
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-194-537	**Air**	**GC 14**	**N/A**	**09/28/11**	**110929L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	100.0	98	99	80-120	1	0-20	
Carbon Dioxide	102.0	98	98	80-120	1	0-20	
Carbon Monoxide	101.0	100	101	80-120	1	0-20	
TGNMO	306.0	97	97	80-120	1	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

Work Order Number: **11-09-1822**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
VMP-29-15-092711	-2.00	-29.50	LC298	Summa Canister 1L
VMP-29-5-092711	-3.00	-29.50	SLC055	Summa Canister 1L
VMP-30-15-092711	-5.00	-29.50	SLC076	Summa Canister 1L
VMP-30-5-092711	-4.00	-29.50	LC330	Summa Canister 1L
VMP-31-15-092711	-3.00	-29.50	SLC081	Summa Canister 1L
VMP-31-5-092711	-4.00	-29.50	LC135	Summa Canister 1L
VMP-32-15-092611	0.10	-29.50	LC114	Summa Canister 1L
VMP-32-5-092611	-3.00	-29.50	LC061	Summa Canister 1L
VMP-33-15-092611	-2.00	-29.50	SLC123	Summa Canister 1L
VMP-33-5-092611	-1.00	-29.50	LC108	Summa Canister 1L
VMP-34-15-092611	-3.00	-29.50	LC344	Summa Canister 1L
VMP-34-5-092611	-2.00	-29.50	SLC030	Summa Canister 1L
VMP-35-15-092611	-3.00	-29.50	SLC083	Summa Canister 1L
VMP-35-5-092611	-3.00	-29.50	SLC085	Summa Canister 1L
VMP-36-15-092611	-5.00	-29.50	LC390	Summa Canister 1L
VMP-36-5-092611	-4.00	-29.50	SLC018	Summa Canister 1L
VMP-37-15-092611	-1.00	-29.50	LC453	Summa Canister 1L
VMP-37-15-092611 DUP	-15.50	-29.50	LC136	Summa Canister 1L
VMP-37-15-092611 DUP	-3.00	-29.50	LC136	Summa Canister 1L
VMP-37-5-092611	-4.00	-29.50	SLC056	Summa Canister 1L
VMP-38-15-092611	-3.00	-29.50	SLC032	Summa Canister 1L

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Work Order Number: **11-09-1822**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
VMP-38-5-092611	-2.00	-29.50	LC387	Summa Canister 1L
VMP-Field Blank-092711	-5.00	-29.50	SLC166	Summa Canister 1L

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-09-1822

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY: **11-09-1822** ☐

Date 9-27-11

Page 1 of 3

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut St

CITY: Pasadena STATE: CA ZIP:

TEL: 626-440-6032 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP- Norwalk

P.O. NO.: 747565

PROJECT CONTACT: Mary Lucas

SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Fixed Gases SCAQMD 25.1		
1	VMP-32-5-092611	9-26-11	0920	Air	1																	X		X		
2	VMP-32-15-092611		0930		1																	X		X		
3	VMP-33-5-092611		0935		1																	X		X		
4	VMP-33-15-092611		1025		1																	X		X		
5	VMP-34-5-092611		1040		1																	X		X		
6	VMP-34-15-092611		1130		1																	X		X		
7	VMP-35-5-092611		1140		1																	X		X		
8	VMP-35-15-092611		1250		1																	X		X		
9	VMP-36-5-092611		1350		1																	X		X		
10	VMP-36-15-092611		1435		1																	X		X		

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) CEL	Date: 9-28-11	Time: 1024
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 9/28/11	Time: 1500
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

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5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY: 09-1822

Date: 9-27-11

Page 2 of 3

LABORATORY CLIENT: Parsons	CLIENT PROJECT NAME / NUMBER: DFSP- Norwalk
ADDRESS: 100 W. Walnut St	P.O. NO.: 747565
CITY: Pasadena STATE: CA ZIP:	PROJECT CONTACT: Mary Lucas
TEL:	E-MAIL:
	SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF | GLOBAL ID | LOG CODE

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Fixed Gases, SCAQMD 25.1		
11	VMP-37-5-092611	9-26-11	1400	Air	1																	X		X		
12	VMP-37-15-092611		1455																			X		X		
13	VMP-37-15-092611 Dup		1456																			X		X		
14	VMP-38-5-092611		1410																			X		X		
15	VMP-38-15-092611	↓	1510																			X		X		
16	VMP-29-5-092711	9-27-11	1020																			X		X		
17	VMP-29-15-092711		1110																			X		X		
18	VMP-30-5-092711		1120																			X		X		
19	VMP-30-15-092711		1315																			X		X		
20	VMP-31-5-092711	↓	1135	↓	↓																	X		X		

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) CEL	Date: 9-28-11	Time: 1024
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 9/28/11	Time: 1500
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

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(925) 689-9022

WO # / LAB USE ONLY: 09-1822

Date: 9-27-11

Page: 3 of 3

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut St

CITY: Pasadena STATE: CA ZIP:

TEL: E-MAIL:

CLIENT PROJECT NAME / NUMBER: DFSP-Norwalk

P.O. NO.: 747565

PROJECT CONTACT: Mary Lucas

SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Fixed Gases, SCAQMD 25.1		
21	VMP-31-IS-092711	9-27-11	1330	Air	1																	X		X		
22	VMP-Field Blank-092711	"	1335	"	1																	X		X		

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) CEL	Date: 9-28-11	Time: 1024
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 9/28/11	Time: 1500
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-09-1822

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: PARSONS DATE: 09/28/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature _____.____ °C + 0.5 °C (CF) = _____.____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter **Initial:** KM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A **Initial:** KM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** NC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☑	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☑Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:**

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:**

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Calscience Environmental Laboratories, Inc.

Supplemental Report 1

The original report has been revised/corrected.

CALSCIENCE

WORK ORDER NUMBER: 11-12-1886

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Parsons, Inc.

Client Project Name: DFSP Norwalk / 747565

Attention: Mary Lucas
100 West Walnut Street
Pasadena, CA 91124-0002

Ranjit K. K. Clarke

Approved for release on 01/5/2012 by:
Ranjit Clarke
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: DFSP Norwalk / 747565
Work Order Number: 11-12-1886

Calscience Environmental Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Case Narrative

Project Name: **DFSP - Norwalk / 747565**
Calscience Work Order Number: **11-12-1886**

1. Requested Analyses:

   The COC received with this SDG did not list any analyses. An e-mail was received from Parsons on 12/27/11 confirming the following analyses:

   EPA TO-15 VOCs
   SCAQMD 25.1 Fixed Gases

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-5-122211	**11-12-1886-1-A**	**12/22/11 09:52**	**Air**	**GC/MS K**	**N/A**	**12/29/11 16:05**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.079	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.016	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0066	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0026	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	0.027	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	0.076	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0032	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	0.041	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	0.0031	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	0.012	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	0.011	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	98	57-129			1,2-Dichloroethane-d4	94	47-137		
Toluene-d8	97	78-156							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-5-122211	**11-12-1886-2-A**	**12/22/11 10:10**	**Air**	**GC/MS K**	**N/A**	**12/29/11 17:00**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.025	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0071	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.010	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0033	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	0.011	0.0061	1	
Dichlorodifluoromethane	0.0030	0.0025	1		Tetrachloroethene	0.0067	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0028	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.41	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	0.0029	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	90	47-137		
Toluene-d8	97	78-156							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-5-122211	**11-12-1886-3-A**	**12/22/11 10:23**	**Air**	**GC/MS K**	**N/A**	**12/29/11 17:53**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.043	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.010	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0082	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0052	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	0.0091	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0025	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	0.0078	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	89	47-137		
Toluene-d8	97	78-156							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-15-122211	**11-12-1886-4-A**	**12/22/11 10:42**	**Air**	**GC/MS K**	**N/A**	**12/29/11 18:47**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.014	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0092	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0034	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	0.28	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	96	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-15-122211	**11-12-1886-5-A**	**12/22/11 10:57**	**Air**	**GC/MS K**	**N/A**	**12/29/11 19:39**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.024	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0069	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0031	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0025	0.0025	1		Tetrachloroethene	0.0055	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0029	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.0043	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15-122211	**11-12-1886-6-A**	**12/22/11 11:16**	**Air**	**GC/MS K**	**N/A**	**12/29/11 20:32**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.033	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.012	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	0.0022	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0019	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0033	0.0025	1		Tetrachloroethene	0.013	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0029	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.047	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.030	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	96	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15DUP-122211	**11-12-1886-7-A**	**12/22/11 11:16**	**Air**	**GC/MS K**	**N/A**	**12/29/11 21:27**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.034	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.010	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0027	0.0025	1		Tetrachloroethene	0.011	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0019	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.075	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.15	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	96	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-5-122211	**11-12-1886-8-A**	**12/22/11 12:47**	**Air**	**GC/MS K**	**N/A**	**12/29/11 22:22**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.018	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0095	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0045	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	0.030	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	0.027	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.19	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-5-122211	**11-12-1886-9-A**	**12/22/11 13:01**	**Air**	**GC/MS K**	**N/A**	**12/29/11 23:17**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.019	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0018	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.0031	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.021	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-5-122211	**11-12-1886-10-A**	**12/22/11 13:14**	**Air**	**GC/MS K**	**N/A**	**12/30/11 00:11**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.025	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0073	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0032	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0031	0.0025	1		Tetrachloroethene	0.0045	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-15-122211	**11-12-1886-11-A**	**12/22/11 13:30**	**Air**	**GC/MS K**	**N/A**	**12/30/11 01:05**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.084	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0076	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.028	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.017	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	0.0086	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	0.0039	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	0.0050	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.025	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	88	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-15-122211	**11-12-1886-12-A**	**12/22/11 13:45**	**Air**	**GC/MS K**	**N/A**	**12/30/11 01:59**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.017	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.0076	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0023	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	0.0071	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	87	47-137		
Toluene-d8	98	78-156							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-122211	**11-12-1886-13-A**	**12/22/11 14:04**	**Air**	**GC/MS K**	**N/A**	**12/30/11 02:53**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.033	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	0.0025	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0062	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	0.014	0.0062	1		Methylene Chloride	0.032	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0039	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0026	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.033	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	0.0077	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	87	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-5-122211	**11-12-1886-14-A**	**12/22/11 14:17**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 17:08**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.029	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0050	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0034	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0029	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	108	57-129			1,2-Dichloroethane-d4	99	47-137		
Toluene-d8	89	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-15-122211	**11-12-1886-15-A**	**12/22/11 14:57**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 17:59**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.052	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0067	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0028	0.0025	1		Tetrachloroethene	0.017	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.016	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	106	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	96	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Field Blank-122211	**11-12-1886-16-A**	**12/22/11 14:58**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 18:53**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.010	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0014	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0031	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.017	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	101	57-129			1,2-Dichloroethane-d4	102	47-137		
Toluene-d8	92	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5-122311	**11-12-1886-17-A**	**12/23/11 07:30**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 19:44**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	0.0028	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0042	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0032	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	106	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	96	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5-122311	**11-12-1886-18-A**	**12/23/11 07:57**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 20:35**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.042	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0072	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0034	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0032	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0023	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	118	57-129			1,2-Dichloroethane-d4	98	47-137		
Toluene-d8	79	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5-122311	**11-12-1886-19-A**	**12/23/11 08:20**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 21:25**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.0096	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	0.013	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0029	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0032	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	108	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	94	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15-122311	**11-12-1886-20-A**	**12/23/11 08:39**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 22:16**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.014	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0032	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0034	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.024	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	95	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15-122311	**11-12-1886-21-A**	**12/23/11 08:52**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 23:06**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.018	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	0.0048	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0032	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.015	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	103	47-137		
Toluene-d8	99	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15-122311	**11-12-1886-22-A**	**12/23/11 09:07**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 23:56**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	0.019	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	0.0035	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	0.0033	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	0.0036	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	0.45	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroethane-d4	102	47-137		
Toluene-d8	96	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-9,652**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**12/29/11 13:11**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	99	57-129			1,2-Dichloroethane-d4	105	47-137		
Toluene-d8	98	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15
Units: ug/L

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-9,654**	**N/A**	**Air**	**GC/MS K**	**N/A**	**12/29/11 13:38**	**111229L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	0.0048	1		t-1,3-Dichloropropene	ND	0.0045	1	
Benzene	ND	0.0016	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1	
Benzyl Chloride	ND	0.0078	1		Ethylbenzene	ND	0.0022	1	
Bromodichloromethane	ND	0.0034	1		4-Ethyltoluene	ND	0.0025	1	
Bromoform	ND	0.0052	1		Hexachloro-1,3-Butadiene	ND	0.016	1	
Bromomethane	ND	0.0019	1		2-Hexanone	ND	0.0061	1	
2-Butanone	ND	0.0044	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1	
Carbon Disulfide	ND	0.0062	1		Methylene Chloride	ND	0.017	1	
Carbon Tetrachloride	ND	0.0031	1		4-Methyl-2-Pentanone	ND	0.0061	1	
Chlorobenzene	ND	0.0023	1		o-Xylene	ND	0.0022	1	
Chloroethane	ND	0.0013	1		p/m-Xylene	ND	0.0087	1	
Chloroform	ND	0.0024	1		Styrene	ND	0.0064	1	
Chloromethane	ND	0.0010	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1	
Dibromochloromethane	ND	0.0043	1		Tert-Butyl Alcohol (TBA)	ND	0.0061	1	
Dichlorodifluoromethane	ND	0.0025	1		Tetrachloroethene	ND	0.0034	1	
Diisopropyl Ether (DIPE)	ND	0.0084	1		Toluene	ND	0.0019	1	
1,1-Dichloroethane	ND	0.0020	1		Trichloroethene	ND	0.0027	1	
1,1-Dichloroethene	ND	0.0020	1		Trichlorofluoromethane	ND	0.0056	1	
1,2-Dibromoethane	ND	0.0038	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1	
Dichlorotetrafluoroethane	ND	0.014	1		1,1,1-Trichloroethane	ND	0.0027	1	
1,2-Dichlorobenzene	ND	0.0030	1		1,1,2-Trichloroethane	ND	0.0027	1	
1,2-Dichloroethane	ND	0.0020	1		Isobutane	ND	0.012	1	
1,2-Dichloropropane	ND	0.0023	1		1,3,5-Trimethylbenzene	ND	0.0025	1	
1,3-Dichlorobenzene	ND	0.0030	1		1,1,2,2-Tetrachloroethane	ND	0.0069	1	
1,4-Dichlorobenzene	ND	0.0030	1		1,2,4-Trimethylbenzene	ND	0.0074	1	
c-1,3-Dichloropropene	ND	0.0023	1		1,2,4-Trichlorobenzene	ND	0.015	1	
c-1,2-Dichloroethene	ND	0.0020	1		Vinyl Acetate	ND	0.0070	1	
t-1,2-Dichloroethene	ND	0.0020	1		Vinyl Chloride	ND	0.0013	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	94	57-129			1,2-Dichloroethane-d4	93	47-137		
Toluene-d8	97	78-156							

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: SCAQMD 25.1M
Units: %V

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-5-122211	**11-12-1886-1-A**	**12/22/11 09:52**	**Air**	**GC 36**	**N/A**	**12/27/11 18:29**	**111227L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	17	0.50	1		Carbon Dioxide	5.8	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-5-122211	**11-12-1886-2-A**	**12/22/11 10:10**	**Air**	**GC 36**	**N/A**	**12/27/11 18:49**	**111227L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	0.91	0.50	1	
Nitrogen	78	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-5-122211	**11-12-1886-3-A**	**12/22/11 10:23**	**Air**	**GC 36**	**N/A**	**12/28/11 11:31**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	0.98	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-15-122211	**11-12-1886-4-A**	**12/22/11 10:42**	**Air**	**GC 36**	**N/A**	**12/28/11 11:51**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	11	0.50	1		Carbon Dioxide	12	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-15-122211	**11-12-1886-5-A**	**12/22/11 10:57**	**Air**	**GC 36**	**N/A**	**12/28/11 12:18**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	2.0	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15-122211	**11-12-1886-6-A**	**12/22/11 11:16**	**Air**	**GC 36**	**N/A**	**12/28/11 12:42**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	2.9	0.50	1	
Nitrogen	76	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15DUP-122211	**11-12-1886-7-A**	**12/22/11 11:16**	**Air**	**GC 36**	**N/A**	**12/28/11 13:01**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	2.8	0.50	1	
Nitrogen	76	0.50	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: SCAQMD 25.1M
Units: %V

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-5-122211	**11-12-1886-8-A**	**12/22/11 12:47**	**Air**	**GC 36**	**N/A**	**12/28/11 13:21**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	23	0.50	1		Nitrogen	77	0.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-5-122211	**11-12-1886-9-A**	**12/22/11 13:01**	**Air**	**GC 36**	**N/A**	**12/28/11 13:51**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	23	0.50	1		Nitrogen	77	0.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-5-122211	**11-12-1886-10-A**	**12/22/11 13:14**	**Air**	**GC 36**	**N/A**	**12/28/11 14:11**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	0.80	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-15-122211	**11-12-1886-11-A**	**12/22/11 13:30**	**Air**	**GC 36**	**N/A**	**12/28/11 14:32**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	1.6	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-15-122211	**11-12-1886-12-A**	**12/22/11 13:45**	**Air**	**GC 36**	**N/A**	**12/28/11 14:49**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	2.7	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-122211	**11-12-1886-13-A**	**12/22/11 14:04**	**Air**	**GC 36**	**N/A**	**12/28/11 15:37**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	1.1	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-5-122211	**11-12-1886-14-A**	**12/22/11 14:17**	**Air**	**GC 36**	**N/A**	**12/28/11 15:59**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	22	0.50	1		Carbon Dioxide	0.60	0.50	1	
Nitrogen	77	0.50	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M
		Units:	%V

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-15-122211	**11-12-1886-15-A**	**12/22/11 14:57**	**Air**	**GC 36**	**N/A**	**12/28/11 16:17**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	18	0.50	1		Carbon Dioxide	5.2	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Field Blank-122211	**11-12-1886-16-A**	**12/22/11 14:58**	**Air**	**GC 36**	**N/A**	**12/28/11 16:37**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	23	0.50	1		Nitrogen	77	0.50	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5-122311	**11-12-1886-17-A**	**12/23/11 07:30**	**Air**	**GC 36**	**N/A**	**12/28/11 16:55**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	21	0.50	1		Carbon Dioxide	2.5	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5-122311	**11-12-1886-18-A**	**12/23/11 07:57**	**Air**	**GC 36**	**N/A**	**12/28/11 17:13**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	20	0.50	1		Carbon Dioxide	4.1	0.50	1	
Nitrogen	76	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5-122311	**11-12-1886-19-A**	**12/23/11 08:20**	**Air**	**GC 36**	**N/A**	**12/28/11 17:30**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	19	0.50	1		Carbon Dioxide	4.3	0.50	1	
Nitrogen	76	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15-122311	**11-12-1886-20-A**	**12/23/11 08:39**	**Air**	**GC 36**	**N/A**	**12/28/11 17:51**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	20	0.50	1		Carbon Dioxide	3.4	0.50	1	
Nitrogen	77	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15-122311	**11-12-1886-21-A**	**12/23/11 08:52**	**Air**	**GC 36**	**N/A**	**12/28/11 18:08**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	19	0.50	1		Carbon Dioxide	5.5	0.50	1	
Nitrogen	75	0.50	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	12/27/11
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M
		Units:	%V

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15-122311	**11-12-1886-22-A**	**12/23/11 09:07**	**Air**	**GC 36**	**N/A**	**12/28/11 18:26**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	19	0.50	1		Carbon Dioxide	4.1	0.50	1	
Nitrogen	76	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-192-496**	**N/A**	**Air**	**GC 36**	**N/A**	**12/27/11 12:04**	**111227L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	ND	0.50	1		Carbon Monoxide	ND	0.50	1	
Nitrogen	ND	0.50	1		Carbon Dioxide	ND	0.50	1	
Methane	ND	0.50	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-192-497**	**N/A**	**Air**	**GC 36**	**N/A**	**12/28/11 10:46**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Oxygen + Argon	ND	0.50	1		Carbon Monoxide	ND	0.50	1	
Nitrogen	ND	0.50	1		Carbon Dioxide	ND	0.50	1	
Methane	ND	0.50	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: SCAQMD 25.1M
Units: ppm (v/v)

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-5-122211	**11-12-1886-1-A**	**12/22/11 09:52**	**Air**	**GC 14**	**N/A**	**12/28/11 12:45**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-5-122211	**11-12-1886-2-A**	**12/22/11 10:10**	**Air**	**GC 14**	**N/A**	**12/28/11 22:32**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	9.3	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-5-122211	**11-12-1886-3-A**	**12/22/11 10:23**	**Air**	**GC 14**	**N/A**	**12/28/11 22:54**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	9.9	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-32-15-122211	**11-12-1886-4-A**	**12/22/11 10:42**	**Air**	**GC 14**	**N/A**	**12/28/11 23:13**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-33-15-122211	**11-12-1886-5-A**	**12/22/11 10:57**	**Air**	**GC 14**	**N/A**	**12/29/11 00:14**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	8.0	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15-122211	**11-12-1886-6-A**	**12/22/11 11:16**	**Air**	**GC 14**	**N/A**	**12/29/11 00:31**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	5.7	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-34-15DUP-122211	**11-12-1886-7-A**	**12/22/11 11:16**	**Air**	**GC 14**	**N/A**	**12/29/11 00:58**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	7.3	5.0	1	
Carbon Monoxide	ND	5.0	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: SCAQMD 25.1M
Units: ppm (v/v)

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-5-122211	**11-12-1886-8-A**	**12/22/11 12:47**	**Air**	**GC 14**	**N/A**	**12/29/11 01:17**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	4300	1.0	1		TGNMO	8.6	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-5-122211	**11-12-1886-9-A**	**12/22/11 13:01**	**Air**	**GC 14**	**N/A**	**12/29/11 01:49**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	3600	1.0	1		TGNMO	8.9	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-5-122211	**11-12-1886-10-A**	**12/22/11 13:14**	**Air**	**GC 14**	**N/A**	**12/29/11 02:17**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	8.7	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-35-15-122211	**11-12-1886-11-A**	**12/22/11 13:30**	**Air**	**GC 14**	**N/A**	**12/29/11 02:38**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	8.5	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-36-15-122211	**11-12-1886-12-A**	**12/22/11 13:45**	**Air**	**GC 14**	**N/A**	**12/29/11 03:06**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	5.7	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-37-15-122211	**11-12-1886-13-A**	**12/22/11 14:04**	**Air**	**GC 14**	**N/A**	**12/29/11 03:37**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	8.0	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-5-122211	**11-12-1886-14-A**	**12/22/11 14:17**	**Air**	**GC 14**	**N/A**	**12/29/11 09:07**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	8.8	5.0	1	
Carbon Monoxide	ND	5.0	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: SCAQMD 25.1M
Units: ppm (v/v)

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-38-15-122211	**11-12-1886-15-A**	**12/22/11 14:57**	**Air**	**GC 14**	**N/A**	**12/29/11 10:13**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Field Blank-122211	**11-12-1886-16-A**	**12/22/11 14:58**	**Air**	**GC 14**	**N/A**	**12/28/11 12:24**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	2.0	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	430	1.0	1		TGNMO	ND	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-5-122311	**11-12-1886-17-A**	**12/23/11 07:30**	**Air**	**GC 14**	**N/A**	**12/29/11 10:33**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-5-122311	**11-12-1886-18-A**	**12/23/11 07:57**	**Air**	**GC 14**	**N/A**	**12/29/11 10:53**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-5-122311	**11-12-1886-19-A**	**12/23/11 08:20**	**Air**	**GC 14**	**N/A**	**12/29/11 11:23**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-29-15-122311	**11-12-1886-20-A**	**12/23/11 08:39**	**Air**	**GC 14**	**N/A**	**12/29/11 11:53**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	6.0	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-30-15-122311	**11-12-1886-21-A**	**12/23/11 08:52**	**Air**	**GC 14**	**N/A**	**12/29/11 12:23**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	ND	5.0	1	
Carbon Monoxide	ND	5.0	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: 12/27/11
Work Order No: 11-12-1886
Preparation: N/A
Method: SCAQMD 25.1M
Units: ppm (v/v)

Project: DFSP Norwalk / 747565

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VMP-31-15-122311	**11-12-1886-22-A**	**12/23/11 09:07**	**Air**	**GC 14**	**N/A**	**12/29/11 12:46**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		TGNMO	9.5	5.0	1	
Carbon Monoxide	ND	5.0	1						

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-194-569**	**N/A**	**Air**	**GC 14**	**N/A**	**12/28/11 21:42**	**111228L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	ND	1.0	1		TGNMO	ND	5.0	1	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-194-570**	**N/A**	**Air**	**GC 14**	**N/A**	**12/28/11 11:55**	**111228L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	1.0	1		Carbon Monoxide	ND	5.0	1	
Carbon Dioxide	ND	1.0	1		TGNMO	ND	5.0	1	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,654	**Air**	**GC/MS K**	**N/A**	**12/29/11**	**111229L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acetone	0.05939	99	98	50-150	33-167	1	0-35	
Benzene	0.07987	111	111	60-156	44-172	1	0-40	
Benzyl Chloride	0.1294	95	95	50-150	33-167	0	0-35	
Bromodichloromethane	0.1675	104	104	50-150	33-167	0	0-35	
Bromoform	0.2584	101	101	62-134	50-146	0	0-38	
Bromomethane	0.09708	100	100	50-150	33-167	1	0-35	
1,3-Butadiene	0.05531	101	101	50-150	33-167	0	0-35	
2-Butanone	0.07373	90	92	50-150	33-167	2	0-35	
Carbon Disulfide	0.07785	125	125	50-150	33-167	0	0-35	
Carbon Tetrachloride	0.1573	106	106	64-154	49-169	1	0-32	
Chlorobenzene	0.1151	109	109	50-150	33-167	0	0-35	
Chloroethane	0.06596	103	103	50-150	33-167	0	0-35	
Chloroform	0.1221	101	101	50-150	33-167	0	0-35	
Chloromethane	0.05163	108	107	50-150	33-167	1	0-35	
Cyclohexane	0.08605	110	111	50-150	33-167	1	0-35	
Dibromochloromethane	0.2130	108	108	50-150	33-167	0	0-35	
Dichlorodifluoromethane	0.1236	96	95	50-150	33-167	0	0-35	
Diisopropyl Ether (DIPE)	0.1045	98	98	50-150	33-167	0	0-35	
1,1-Dichloroethane	0.1012	105	106	50-150	33-167	0	0-35	
1,1-Dichloroethene	0.09912	97	130	50-150	33-167	30	0-35	
1,2-Dibromoethane	0.1921	108	109	54-144	39-159	1	0-36	
Dichlorotetrafluoroethane	0.1748	97	96	50-150	33-167	2	0-35	
1,2-Dichlorobenzene	0.1503	85	84	34-160	13-181	0	0-47	
1,2-Dichloroethane	0.1012	98	97	69-153	55-167	0	0-35	
1,2-Dichloropropane	0.1155	111	112	67-157	52-172	1	0-35	
1,3-Dichlorobenzene	0.1503	91	92	50-150	33-167	0	0-35	
1,4-Dichlorobenzene	0.1503	91	91	36-156	16-176	0	0-47	
1,4-Dioxane	0.09009	93	93	50-150	33-167	0	0-35	
c-1,3-Dichloropropene	0.1135	115	116	61-157	45-173	1	0-35	
c-1,2-Dichloroethene	0.09912	111	112	50-150	33-167	1	0-35	
t-1,2-Dichloroethene	0.09912	103	104	50-150	33-167	1	0-35	
t-1,3-Dichloropropene	0.1135	124	125	50-150	33-167	1	0-35	
Ethanol	0.1884	87	86	50-150	33-167	1	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,654	**Air**	**GC/MS K**	**N/A**	**12/29/11**	**111229L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Ethyl Acetate	0.09009	106	107	50-150	33-167	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	0.1045	98	99	50-150	33-167	1	0-35	
Ethylbenzene	0.1086	110	111	52-154	35-171	1	0-38	
4-Ethyltoluene	0.1229	106	106	50-150	33-167	0	0-35	
Heptane	0.1025	109	110	50-150	33-167	1	0-35	
Hexachloro-1,3-Butadiene	0.2666	70	70	50-150	33-167	0	0-35	
Hexane	0.08812	106	107	50-150	33-167	1	0-35	
2-Hexanone	0.1024	107	109	50-150	33-167	1	0-35	
Methyl-t-Butyl Ether (MTBE)	0.09013	101	101	50-150	33-167	1	0-35	
Methylene Chloride	0.08684	120	122	50-150	33-167	2	0-35	
4-Methyl-2-Pentanone	0.1024	110	111	50-150	33-167	1	0-35	
Naphthalene	0.1311	65	64	40-190	15-215	1	0-35	
o-Xylene	0.1086	106	107	52-148	36-164	1	0-38	
p/m-Xylene	0.2171	106	106	42-156	23-175	0	0-41	
Propene	0.04303	107	106	50-150	33-167	0	0-35	
Styrene	0.1065	103	103	50-150	33-167	0	0-35	
Tert-Amyl-Methyl Ether (TAME)	0.1045	94	95	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	90	113	50-150	33-167	23	0-35	
Tetrachloroethene	0.1696	108	109	56-152	40-168	1	0-40	
Tetrahydrofuran	0.07373	106	106	50-150	33-167	0	0-35	
Toluene	0.09421	110	112	56-146	41-161	1	0-43	
Trichloroethene	0.1343	107	107	63-159	47-175	0	0-34	
Trichlorofluoromethane	0.1405	94	94	50-150	33-167	1	0-35	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	128	128	50-150	33-167	0	0-35	
1,1,1-Trichloroethane	0.1364	103	103	50-150	33-167	0	0-35	
1,1,2-Trichloroethane	0.1364	109	110	65-149	51-163	1	0-37	
1,2,3-Trichloropropane	0.1507	100	100	50-150	33-167	0	0-35	
Acrolein	0.05732	97	96	50-150	33-167	1	0-35	
Acrylonitrile	0.05425	94	93	50-150	33-167	1	0-35	
Methyl Methacrylate	0.1024	113	114	50-150	33-167	1	0-35	
Propane	0.09018	99	98	50-150	33-167	1	0-35	
Butane	0.1189	98	97	50-150	33-167	1	0-35	
Methanol	0.09828	65	68	50-150	33-167	4	0-35	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,654	**Air**	**GC/MS K**	**N/A**	**12/29/11**	**111229L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,2,4-Trimethyl Pentane	0.1168	100	102	50-150	33-167	1	0-35	
Isobutane	0.1189	97	96	50-150	33-167	1	0-35	
1,1,1,2-Tetrafluoroethane	0.1043	104	104	50-150	33-167	0	0-35	
1,3,5-Trimethylbenzene	0.1229	99	99	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	0.1716	90	90	50-150	33-167	1	0-35	
1,2,4-Trimethylbenzene	0.1229	96	97	50-150	33-167	1	0-35	
1,2,4-Trichlorobenzene	0.1855	73	72	50-150	33-167	1	0-35	
Vinyl Acetate	0.08803	91	92	50-150	33-167	1	0-35	
Vinyl Chloride	0.06391	103	101	45-177	23-199	1	0-36	
1,1-Difluoroethane	0.06754	101	102	50-150	33-167	1	0-35	
Isopropanol	0.06145	89	88	50-150	33-167	1	0-35	
2-Chlorotoluene	0.1294	110	110	50-150	33-167	0	0-35	

Total number of LCS compounds : 78
Total number of ME compounds : 0
Total number of ME compounds allowed : 4
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,652	**Air**	**GC/MS YY**	**N/A**	**12/29/11**	**111229L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acetone	0.05939	115	117	50-150	33-167	2	0-35	
Benzene	0.07987	102	105	60-156	44-172	2	0-40	
Benzyl Chloride	0.1294	102	101	50-150	33-167	1	0-35	
Bromodichloromethane	0.1675	105	108	50-150	33-167	2	0-35	
Bromoform	0.2584	103	102	62-134	50-146	1	0-38	
Bromomethane	0.09708	109	110	50-150	33-167	1	0-35	
1,3-Butadiene	0.05531	127	128	50-150	33-167	1	0-35	
2-Butanone	0.07373	113	115	50-150	33-167	2	0-35	
Carbon Disulfide	0.07785	107	109	50-150	33-167	2	0-35	
Carbon Tetrachloride	0.1573	111	113	64-154	49-169	2	0-32	
Chlorobenzene	0.1151	97	98	50-150	33-167	1	0-35	
Chloroethane	0.06596	124	125	50-150	33-167	1	0-35	
Chloroform	0.1221	102	104	50-150	33-167	2	0-35	
Chloromethane	0.05163	135	137	50-150	33-167	1	0-35	
Cyclohexane	0.08605	106	109	50-150	33-167	3	0-35	
Dibromochloromethane	0.2130	107	106	50-150	33-167	1	0-35	
Dichlorodifluoromethane	0.1236	111	112	50-150	33-167	2	0-35	
Diisopropyl Ether (DIPE)	0.1045	107	109	50-150	33-167	2	0-35	
1,1-Dichloroethane	0.1012	103	105	50-150	33-167	2	0-35	
1,1-Dichloroethene	0.09912	110	112	50-150	33-167	2	0-35	
1,2-Dibromoethane	0.1921	102	102	54-144	39-159	0	0-36	
Dichlorotetrafluoroethane	0.1748	111	112	50-150	33-167	1	0-35	
1,2-Dichlorobenzene	0.1503	84	83	34-160	13-181	1	0-47	
1,2-Dichloroethane	0.1012	105	107	69-153	55-167	2	0-35	
1,2-Dichloropropane	0.1155	106	109	67-157	52-172	3	0-35	
1,3-Dichlorobenzene	0.1503	90	89	50-150	33-167	1	0-35	
1,4-Dichlorobenzene	0.1503	90	89	36-156	16-176	1	0-47	
1,4-Dioxane	0.09009	94	95	50-150	33-167	2	0-35	
c-1,3-Dichloropropene	0.1135	113	116	61-157	45-173	2	0-35	
c-1,2-Dichloroethene	0.09912	102	104	50-150	33-167	2	0-35	
t-1,2-Dichloroethene	0.09912	97	99	50-150	33-167	2	0-35	
t-1,3-Dichloropropene	0.1135	126	128	50-150	33-167	2	0-35	
Ethanol	0.1884	106	107	50-150	33-167	1	0-35	

RPD - Relative Percent Difference , CL - Control Limit

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,652	**Air**	**GC/MS YY**	**N/A**	**12/29/11**	**111229L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Ethyl Acetate	0.09009	105	107	50-150	33-167	2	0-35	
Ethyl-t-Butyl Ether (ETBE)	0.1045	99	102	50-150	33-167	3	0-35	
Ethylbenzene	0.1086	103	103	52-154	35-171	0	0-38	
4-Ethyltoluene	0.1229	102	102	50-150	33-167	1	0-35	
Heptane	0.1025	101	103	50-150	33-167	3	0-35	
Hexachloro-1,3-Butadiene	0.2666	65	65	50-150	33-167	0	0-35	
Hexane	0.08812	115	117	50-150	33-167	2	0-35	
2-Hexanone	0.1024	110	110	50-150	33-167	0	0-35	
Methyl-t-Butyl Ether (MTBE)	0.09013	99	101	50-150	33-167	3	0-35	
Methylene Chloride	0.08684	95	97	50-150	33-167	2	0-35	
4-Methyl-2-Pentanone	0.1024	111	114	50-150	33-167	3	0-35	
Naphthalene	0.1311	71	72	40-190	15-215	1	0-35	
o-Xylene	0.1086	102	102	52-148	36-164	0	0-38	
p/m-Xylene	0.2171	105	105	42-156	23-175	0	0-41	
Propene	0.04303	119	122	50-150	33-167	2	0-35	
Styrene	0.1065	95	95	50-150	33-167	0	0-35	
Tert-Amyl-Methyl Ether (TAME)	0.1045	95	98	50-150	33-167	3	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	99	103	50-150	33-167	4	0-35	
Tetrachloroethene	0.1696	98	97	56-152	40-168	1	0-40	
Tetrahydrofuran	0.07373	112	115	50-150	33-167	3	0-35	
Toluene	0.09421	103	103	56-146	41-161	0	0-43	
Trichloroethene	0.1343	103	105	63-159	47-175	2	0-34	
Trichlorofluoromethane	0.1405	148	151	50-150	33-167	2	0-35	ME
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	106	108	50-150	33-167	2	0-35	
1,1,1-Trichloroethane	0.1364	105	107	50-150	33-167	2	0-35	
1,1,2-Trichloroethane	0.1364	104	106	65-149	51-163	2	0-37	
1,2,3-Trichloropropane	0.1507	105	104	50-150	33-167	0	0-35	
Acrolein	0.05732	118	118	50-150	33-167	1	0-35	
Acrylonitrile	0.05425	157	160	50-150	33-167	2	0-35	ME
Methyl Methacrylate	0.1024	106	109	50-150	33-167	2	0-35	
Propane	0.09018	115	119	50-150	33-167	3	0-35	
Butane	0.1189	124	126	50-150	33-167	1	0-35	
Methanol	0.09828	160	160	50-150	33-167	0	0-35	ME

RPD - Relative Percent Difference , CL - Control Limit

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received: N/A
Work Order No: 11-12-1886
Preparation: N/A
Method: EPA TO-15

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-9,652	**Air**	**GC/MS YY**	**N/A**	**12/29/11**	**111229L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,2,4-Trimethyl Pentane	0.1168	102	105	50-150	33-167	3	0-35	
Isobutane	0.1189	123	124	50-150	33-167	1	0-35	
1,1,1,2-Tetrafluoroethane	0.1043	101	102	50-150	33-167	2	0-35	
1,3,5-Trimethylbenzene	0.1229	97	97	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	0.1716	94	93	50-150	33-167	0	0-35	
1,2,4-Trimethylbenzene	0.1229	95	94	50-150	33-167	1	0-35	
1,2,4-Trichlorobenzene	0.1855	69	69	50-150	33-167	0	0-35	
Vinyl Acetate	0.08803	98	101	50-150	33-167	2	0-35	
Vinyl Chloride	0.06391	119	121	45-177	23-199	1	0-36	
1,1-Difluoroethane	0.06754	104	106	50-150	33-167	2	0-35	
Isopropanol	0.06145	184	190	50-150	33-167	3	0-35	X
2-Chlorotoluene	0.1294	109	109	50-150	33-167	0	0-35	

Total number of LCS compounds : 78
Total number of ME compounds : 3
Total number of ME compounds allowed : 4
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-192-496	**Air**	**GC 36**	**N/A**	**12/27/11**	**111227L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oxygen + Argon	3.500	98	100	80-120	1	0-20	
Nitrogen	10.02	96	97	80-120	1	0-20	
Carbon Dioxide	10.07	110	113	80-120	2	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-192-497	**Air**	**GC 36**	**N/A**	**12/28/11**	**111228L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oxygen + Argon	3.500	98	99	80-120	1	0-20	
Nitrogen	10.02	95	96	80-120	1	0-20	
Carbon Dioxide	10.07	111	112	80-120	1	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-194-570	**Air**	**GC 14**	**N/A**	**12/28/11**	**111228L01**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	100.0	100	99	80-120	1	0-20	
Carbon Dioxide	102.0	99	99	80-120	0	0-20	
Carbon Monoxide	101.0	104	103	80-120	1	0-20	
TGNMO	306.0	99	98	80-120	1	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Parsons, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	11-12-1886
Pasadena, CA 91124-0002		Preparation:	N/A
		Method:	SCAQMD 25.1M

Project: DFSP Norwalk / 747565

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-194-569	**Air**	**GC 14**	**N/A**	**12/28/11**	**111228L02**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	100.0	100	100	80-120	0	0-20	
Carbon Dioxide	102.0	102	101	80-120	1	0-20	
Carbon Monoxide	101.0	104	104	80-120	0	0-20	
TGNMO	306.0	100	100	80-120	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: **11-12-1886**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
VMP-32-5-122211	-1.00	-29.80	LC198	Summa Canister 1L
VMP-33-5-122211	-2.00	-29.80	LC035	Summa Canister 1L
VMP-34-5-122211	-0.50	-29.80	LC167	Summa Canister 1L
VMP-32-15-122211	-3.00	-29.80	LC450	Summa Canister 1L
VMP-33-15-122211	-2.00	-29.70	LC199	Summa Canister 1L
VMP-34-15-122211	-5.00	-29.80	LC224	Summa Canister 1L
VMP-34-15DUP-122211	-2.00	-29.80	LC257	Summa Canister 1L
VMP-35-5-122211	-5.00	-29.80	SLC101	Summa Canister 1L
VMP-36-5-122211	-2.50	-29.80	LC205	Summa Canister 1L
VMP-37-5-122211	-4.00	-29.60	LC227	Summa Canister 1L
VMP-35-15-122211	0.00	-29.80	LC328	Summa Canister 1L
VMP-36-15-122211	-2.00	-29.80	SLC082	Summa Canister 1L
VMP-37-15-122211	-3.00	-29.80	SLC123	Summa Canister 1L
VMP-38-5-122211	-2.00	-29.80	LC353	Summa Canister 1L
VMP-38-15-122211	-5.00	-29.80	LC364	Summa Canister 1L
Field Blank-122211	-2.00	-29.80	LC308	Summa Canister 1L
VMP-29-5-122311	-2.00	-29.80	LC245	Summa Canister 1L
VMP-30-5-122311	-5.00	-29.80	LC432	Summa Canister 1L
VMP-31-5-122311	-1.00	-29.80	LC242	Summa Canister 1L
VMP-29-15-122311	0.00	-29.80	LC468	Summa Canister 1L
VMP-30-15-122311	0.00	-29.80	LC443	Summa Canister 1L

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Work Order Number: **11-12-1886**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
VMP-31-15-122311	-2.00	-29.80	LC142	Summa Canister 1L

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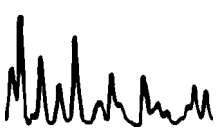

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: 11-12-1886

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 FAX: (714) 894-7501

AIR CHAIN OF CUSTODY RECORD

DATE: 12-23-11
PAGE: 1 OF 2

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut St
CITY: Pasadena STATE: CA ZIP:
TEL: 626-440-6032 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP-Norwalk / 747565
PROJECT ADDRESS: 15306 Norwalk Blvd
CITY: Norwalk STATE: CA ZIP:
PROJECT CONTACT: Mary Lucas

P.O.NO.:
LAB CONTACT OR QUOTE NO. R. Clarke
LAB USE ONLY 11-12-1886

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SAMPLER(S): (NAME / SIGNATURE) Glenn Androsko Glenn Androsko

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ EDD

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type (I) Indoor (SV) Soil Vap. (A) Ambient	Sampling Equipment: Canister ID#	Canister Size 6L or 1L	Flow Controller ID #	Start Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)	Stop Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)
1	VMP-32-5-122211		SV	LC198	1	A169	12-22-11	0945	-30	12-22-11	0952	0
2	VMP-33-5-122211			LC035	1	A206		1003	-30		1010	0
3	VMP-34-5-122211			LC167	1	A222		1017	-30		1023	0
4	VMP-32-15-122211			LC450	1	A342		1036	-30		1042	0
5	VMP-33-15-122211			LC199	1	A168		1051	-30		1057	0
6	VMP-34-15-122211			LC224	1	A146		1110	-30		1116	0
7	VMP-34-15 Dup-122211			LC146	1	A27		1110	-30		1116	0
8	VMP-35-5-122211			SLC101	1	A76		1241	-30		1247	0
9	VMP-36-5-122211			LC205	1	A187		1255	-30		1301	0
10	VMP-37-5-122211			LC227	1	A356		1308	-30		1314	0
11	VMP-35-15-122211			LC328	1	A337		1324	-30		1330	0
12	VMP-36-15-122211			SLC032	1	A372		1339	-30		1345	0
13	VMP-37-15-122211			SLC215	1	A215		1358	-30		1404	0
14	VMP-38-5-122211			LC353	1	A204		1411	-30		1417	0
15	VMP-38-15-122211			LC364	1	A90		1452	-30		1457	0
16	Field Blank-122211			LC308	1	A361		1453	-26		1458	0

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature) Rudy W CGL	Date: 12/27/11	Time: 1114
Relinquished by: (Signature) Rudy W	Received by: (Signature) Rudy W. CGL	Date: 12/27/11	Time: 1125
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 FAX: (714) 894-7501

AIR CHAIN OF CUSTODY RECORD

DATE: 12-23-11
PAGE: 2 OF 2

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut St
CITY: Pasadena STATE: CA ZIP:
TEL: 626-440-6022 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP- Norwalk
PROJECT ADDRESS: 15306 Norwalk Blvd
CITY: Norwalk STATE: CA ZIP:
PROJECT CONTACT: Mary Lucas

P.O.NO.:
LAB CONTACT OR QUOTE NO.
LAB USE ONLY: 12-1886

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS
SAMPLER(S): (NAME / SIGNATURE) Glenn Androsko Glenn Androsko

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ EDD

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type (I) Indoor (SV) Soil Vap. (A) Ambient	Sampling Equipment: Canister ID#	Canister Size 6L or 1L	Flow Controller ID #	Start Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)	Stop Sampling Information: Date	Time (24 hr clock)	Canister Pressure ("Hg)
17 1	VMP-29-5-122311		SV	LC245	1L	A333	12-23-11	0725	-30	12-23-11	0730	0
18 2	VMP-30-5-122311		↓	LC432	↓	A01	↓	0751	-30	↓	0757	-5
19 3	VMP-31-5-122311		↓	LC242	↓	A376	↓	0815	-30	↓	0820	0
20 4	VMP-29-15-122311		↓	LC468	↓	A351	↓	0833	-30	↓	0839	0
21 5	VMP-30-15-122311		↓	LC443	↓	A04	↓	0846	-30	↓	0852	0
22 6	VMP-31-15-122311		↓	LC142	↓	A330	↓	0902	-30	↓	0907	0
7												
8												
9												
10												
11												
12												
13												
14												
15												

12/27/11

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature) CEL	Date: 12/27/11	Time: 1114
Relinquished by: (Signature) Rudy M	Received by: (Signature)	Date: 12/27/11	Time: 1525
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

12/01/11 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-12-1886

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: PARSONS DATE: 12/27/11

TEMPERATURE: Thermometer ID: SC3 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature ____.____ °C - 0.3 °C (CF) = ____.____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter **Initial:** RM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A **Initial:** RM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** KR

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☑ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☑Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** KR

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** PS

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:**_____

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Appendix B
USEPA (2004) Johnson and Ettinger Spreadsheets

SG-ADV
Version 2.0; 02/03

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.00E+00			1,2,4-Trimethylbenzene
95501	1.00E+00			1,2-Dichlorobenzene
107062	1.00E+00			1,2-Dichloroethane
108678	1.00E+00			1,3,5-Trimethylbenzene
541731	1.00E+00			1,3-Dichlorobenzene
106467	1.00E+00			1,4-Dichlorobenzene
78933	1.00E+00			2-Butanone (methyl ethyl ketone)
591786	1.00E+00			2-Hexanone
67641	1.00E+00			Acetone
71432	1.00E+00			Benzene
75274	1.00E+00			Bromodichloromethane
156592	1.00E+00			c-1,2-Dichloroethene
75150	1.00E+00			Carbon disulfide
56235	1.00E+00			Carbon tetrachloride
67663	1.00E+00			Chloroform
74873	1.00E+00			Chloromethane
75718	1.00E+00			Dichlorodifluoromethane (Freon 12)
100414	1.00E+00			Ethylbenzene
75092	1.00E+00			Methylene chloride
95476	1.00E+00			o-Xylene
106423	1.00E+00			p/m-Xylene
75650	1.00E+00			Tert-Butyl Alcohol (TBA)
127184	1.00E+00			Tetrachloroethene (PCE)
108883	1.00E+00			Toluene
79016	1.00E+00			Trichloroethene
75014	1.00E+00			Vinyl acetate

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 5 FT BGS
DATA ENTRY SHEET

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^{o}C)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of Ls (cell F24)					
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		
15	152.4	24	152.4			S		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
	1.66	0.375	0.054								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
15	40	1000	1000	244	0.1	1.5	5

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (unitless)
70	25	25	250	0.333333333

END

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 5 FT BGS
INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	137.4	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 5 FT BGS
INTERMEDIATE CALCULATIONS SHEET

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	11,516	5.76E-03	2.36E-01	1.80E-04	9.80E-03	0.00E+00	0.00E+00	9.80E-03	137.4
1.00E+06	5.00E-03	15	11,546	1.77E-03	7.28E-02	1.80E-04	1.12E-02	0.00E+00	0.00E+00	1.12E-02	137.4
1.00E+06	5.00E-03	15	8,368	9.31E-04	3.82E-02	1.80E-04	1.68E-02	0.00E+00	0.00E+00	1.68E-02	137.4
1.00E+06	5.00E-03	15	11,495	5.50E-03	2.25E-01	1.80E-04	9.73E-03	0.00E+00	0.00E+00	9.73E-03	137.4
1.00E+06	5.00E-03	15	11,029	2.90E-03	1.19E-01	1.80E-04	1.12E-02	0.00E+00	0.00E+00	1.12E-02	137.4
1.00E+06	5.00E-03	15	11,098	2.25E-03	9.22E-02	1.80E-04	1.12E-02	0.00E+00	0.00E+00	1.12E-02	137.4
1.00E+06	5.00E-03	15	8,244	5.32E-05	2.18E-03	1.80E-04	1.31E-02	0.00E+00	0.00E+00	1.31E-02	137.4
1.00E+06	5.00E-03	15	12,217	7.56E-05	3.10E-03	1.80E-04	1.14E-02	0.00E+00	0.00E+00	1.14E-02	137.4
1.00E+06	5.00E-03	15	7,384	3.71E-05	1.52E-03	1.80E-04	2.00E-02	0.00E+00	0.00E+00	2.00E-02	137.4
1.00E+06	5.00E-03	15	7,977	5.29E-03	2.17E-01	1.80E-04	1.42E-02	0.00E+00	0.00E+00	1.42E-02	137.4
1.00E+06	5.00E-03	15	8,526	1.52E-03	6.24E-02	1.80E-04	4.82E-03	0.00E+00	0.00E+00	4.82E-03	137.4
1.00E+06	5.00E-03	15	7,592	3.90E-03	1.60E-01	1.80E-04	1.19E-02	0.00E+00	0.00E+00	1.19E-02	137.4
1.00E+06	5.00E-03	15	6,572	2.91E-02	1.19E+00	1.80E-04	1.68E-02	0.00E+00	0.00E+00	1.68E-02	137.4
1.00E+06	5.00E-03	15	7,716	2.90E-02	1.19E+00	1.80E-04	1.26E-02	0.00E+00	0.00E+00	1.26E-02	137.4
1.00E+06	5.00E-03	15	7,407	3.51E-03	1.44E-01	1.80E-04	1.68E-02	0.00E+00	0.00E+00	1.68E-02	137.4
1.00E+06	5.00E-03	15	4,578	8.57E-03	3.52E-01	1.80E-04	2.04E-02	0.00E+00	0.00E+00	2.04E-02	137.4
1.00E+06	5.00E-03	15	7,961	3.27E-01	1.34E+01	1.80E-04	1.08E-02	0.00E+00	0.00E+00	1.08E-02	137.4
1.00E+06	5.00E-03	15	9,994	7.43E-03	3.05E-01	1.80E-04	1.21E-02	0.00E+00	0.00E+00	1.21E-02	137.4
1.00E+06	5.00E-03	15	6,884	2.10E-03	8.62E-02	1.80E-04	1.63E-02	0.00E+00	0.00E+00	1.63E-02	137.4
1.00E+06	5.00E-03	15	10,245	4.88E-03	2.00E-01	1.80E-04	1.41E-02	0.00E+00	0.00E+00	1.41E-02	137.4
1.00E+06	5.00E-03	15	10,083	7.22E-03	2.96E-01	1.80E-04	1.24E-02	0.00E+00	0.00E+00	1.24E-02	137.4
1.00E+06	5.00E-03	15	10,657	1.33E-05	5.44E-04	1.80E-04	1.41E-02	0.00E+00	0.00E+00	1.41E-02	137.4
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	1.16E-02	0.00E+00	0.00E+00	1.16E-02	137.4
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	1.41E-02	0.00E+00	0.00E+00	1.41E-02	137.4
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	1.28E-02	0.00E+00	0.00E+00	1.28E-02	137.4
1.00E+06	5.00E-03	15	8,559	4.86E-04	1.99E-02	1.80E-04	1.37E-02	0.00E+00	0.00E+00	1.37E-02	137.4

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 5 FT BGS
INTERMEDIATE CALCULATIONS SHEET

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
15	1.00E+00	1.25	8.33E+01	9.80E-03	5.00E+03	1.21E+11	3.78E-04	3.78E-04	-	7.0E-03
15	1.00E+00	1.25	8.33E+01	1.12E-02	5.00E+03	5.42E+09	4.04E-04	4.04E-04	-	2.0E-01
15	1.00E+00	1.25	8.33E+01	1.68E-02	5.00E+03	2.87E+06	4.88E-04	4.88E-04	2.1E-05	7.0E-03
15	1.00E+00	1.25	8.33E+01	9.73E-03	5.00E+03	1.43E+11	3.77E-04	3.77E-04	-	7.0E-03
15	1.00E+00	1.25	8.33E+01	1.12E-02	5.00E+03	5.08E+09	4.05E-04	4.05E-04	-	3.5E-03
15	1.00E+00	1.25	8.33E+01	1.12E-02	5.00E+03	5.42E+09	4.04E-04	4.04E-04	1.1E-05	8.0E-01
15	1.00E+00	1.25	8.33E+01	1.31E-02	5.00E+03	2.05E+08	4.37E-04	4.37E-04	-	5.0E+00
15	1.00E+00	1.25	8.33E+01	1.14E-02	5.00E+03	3.35E+09	4.09E-04	4.09E-04	-	3.0E-02
15	1.00E+00	1.25	8.33E+01	2.00E-02	5.00E+03	2.60E+05	5.22E-04	5.22E-04	-	3.1E+01
15	1.00E+00	1.25	8.33E+01	1.42E-02	5.00E+03	4.29E+07	4.54E-04	4.54E-04	2.9E-05	3.0E-02
15	1.00E+00	1.25	8.33E+01	4.82E-03	5.00E+03	3.45E+22	2.43E-04	2.43E-04	3.7E-05	7.0E-02
15	1.00E+00	1.25	8.33E+01	1.19E-02	5.00E+03	1.33E+09	4.18E-04	4.18E-04	-	6.0E-02
15	1.00E+00	1.25	8.33E+01	1.68E-02	5.00E+03	2.87E+06	4.88E-04	4.88E-04	-	7.0E-01
15	1.00E+00	1.25	8.33E+01	1.26E-02	5.00E+03	4.08E+08	4.30E-04	4.30E-04	4.2E-05	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.68E-02	5.00E+03	2.87E+06	4.88E-04	4.88E-04	5.3E-06	9.8E-02
15	1.00E+00	1.25	8.33E+01	2.04E-02	5.00E+03	2.14E+05	5.25E-04	5.25E-04	-	9.0E-02
15	1.00E+00	1.25	8.33E+01	1.08E-02	5.00E+03	1.26E+10	3.97E-04	3.97E-04	-	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.21E-02	5.00E+03	9.01E+08	4.22E-04	4.22E-04	2.5E-06	1.0E+00
15	1.00E+00	1.25	8.33E+01	1.63E-02	5.00E+03	4.46E+06	4.82E-04	4.82E-04	1.0E-06	6.0E-01
15	1.00E+00	1.25	8.33E+01	1.41E-02	5.00E+03	5.25E+07	4.52E-04	4.52E-04	-	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.24E-02	5.00E+03	5.42E+08	4.27E-04	4.27E-04	-	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.41E-02	5.00E+03	4.89E+07	4.53E-04	4.53E-04	-	3.0E+01
15	1.00E+00	1.25	8.33E+01	1.16E-02	5.00E+03	2.13E+09	4.13E-04	4.13E-04	5.9E-06	2.7E-01
15	1.00E+00	1.25	8.33E+01	1.41E-02	5.00E+03	5.25E+07	4.52E-04	4.52E-04	-	5.0E+00
15	1.00E+00	1.25	8.33E+01	1.28E-02	5.00E+03	3.17E+08	4.32E-04	4.32E-04	2.0E-06	2.0E-03
15	1.00E+00	1.25	8.33E+01	1.37E-02	5.00E+03	7.97E+07	4.47E-04	4.47E-04	-	2.0E-01

END

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 5 FT BGS
RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

COPC	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)	REMEDIAL GOALS: Carcinogen ($\mu g/m^3$)	Noncarcinogen ($\mu g/m^3$)	Minimum ($\mu g/m^3$)
1,2,4-Trimethylbenzene	-	1.2E-05	-	8.11E+04	8.11E+04
1,2-Dichlorobenzene	-	4.6E-07	-	2.17E+06	2.17E+06
1,2-Dichloroethane	8.3E-10	1.6E-05	1.20E+03	6.29E+04	1.20E+03
1,3,5-Trimethylbenzene	-	1.2E-05	-	8.14E+04	8.14E+04
1,3-Dichlorobenzene	-	2.6E-05	-	3.78E+04	3.78E+04
1,4-Dichlorobenzene	3.6E-10	1.2E-07	2.76E+03	8.66E+06	2.76E+03
2-Butanone (methyl ethyl ketc	-	2.0E-08	-	5.01E+07	5.01E+07
2-Hexanone	-	3.1E-06	-	3.21E+05	3.21E+05
Acetone	-	3.9E-09	-	2.59E+08	2.59E+08
Benzene	1.1E-09	3.5E-06	9.31E+02	2.89E+05	9.31E+02
Bromodichloromethane	7.3E-10	7.9E-07	1.37E+03	1.26E+06	1.37E+03
c-1,2-Dichloroethene	-	1.6E-06	-	6.29E+05	6.29E+05
Carbon disulfide	-	1.6E-07	-	6.29E+06	6.29E+06
Carbon tetrachloride	1.5E-09	9.8E-07	6.80E+02	1.02E+06	6.80E+02
Chloroform	2.1E-10	1.1E-06	4.75E+03	8.77E+05	4.75E+03
Chloromethane	-	1.3E-06	-	7.51E+05	7.51E+05
Dichlorodifluoromethane (Fre	-	9.1E-07	-	1.10E+06	1.10E+06
Ethylbenzene	8.6E-11	9.6E-08	1.16E+04	1.04E+07	1.16E+04
Methylene chloride	3.9E-11	1.8E-07	2.55E+04	5.45E+06	2.55E+04
o-Xylene	-	1.0E-06	-	9.69E+05	9.69E+05
p/m-Xylene	-	9.7E-07	-	1.03E+06	1.03E+06
Tert-Butyl Alcohol (TBA)	-	3.4E-09	-	2.90E+08	2.90E+08
Tetrachloroethene (PCE)	2.0E-10	3.5E-07	5.03E+03	2.88E+06	5.03E+03
Toluene	-	2.1E-08	-	4.85E+07	4.85E+07
Trichloroethene	7.0E-11	4.9E-05	1.42E+04	2.03E+04	1.42E+04
Vinyl acetate	-	5.1E-07	-	1.96E+06	1.96E+06

SG-ADV
Version 2.0; 02/03

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.00E+00			1,2,4-Trimethylbenzene
95501	1.00E+00			1,2-Dichlorobenzene
107062	1.00E+00			1,2-Dichloroethane
108678	1.00E+00			1,3,5-Trimethylbenzene
541731	1.00E+00			1,3-Dichlorobenzene
106467	1.00E+00			1,4-Dichlorobenzene
78933	1.00E+00			2-Butanone (methyl ethyl ketone)
591786	1.00E+00			2-Hexanone
67641	1.00E+00			Acetone
71432	1.00E+00			Benzene
75274	1.00E+00			Bromodichloromethane
156592	1.00E+00			c-1,2-Dichloroethene
75150	1.00E+00			Carbon disulfide
56235	1.00E+00			Carbon tetrachloride
67663	1.00E+00			Chloroform
74873	1.00E+00			Chloromethane
75718	1.00E+00			Dichlorodifluoromethane (Freon 12)
100414	1.00E+00			Ethylbenzene
75092	1.00E+00			Methylene chloride
95476	1.00E+00			o-Xylene
106423	1.00E+00			p/m-Xylene
75650	1.00E+00			Tert-Butyl Alcohol (TBA)
127184	1.00E+00			Tetrachloroethene (PCE)
108883	1.00E+00			Toluene
79016	1.00E+00			Trichloroethene
75014	1.00E+00			Vinyl acetate

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of Ls (cell F24)					
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		
15	457.2	24	457.2			S		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
	1.66	0.375	0.054								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP (g/cm-s^2)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
15	40	1000	1000	244	0.1	1.5	5

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (unitless)
70	25	25	250	0.333333333

END

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 15 FT BGS
INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05
7.88E+08	442.2	0.321	ERROR	ERROR	0.003	1.02E-07	0.998	1.01E-07	4,000	1.00E+00	1.02E+05

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 15 FT BGS
INTERMEDIATE CALCULATIONS SHEET

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	11,516	5.76E-03	2.36E-01	1.80E-04	9.80E-03	0.00E+00	0.00E+00	9.80E-03	442.2
1.00E+06	5.00E-03	15	11,546	1.77E-03	7.28E-02	1.80E-04	1.12E-02	0.00E+00	0.00E+00	1.12E-02	442.2
1.00E+06	5.00E-03	15	8,368	9.31E-04	3.82E-02	1.80E-04	1.68E-02	0.00E+00	0.00E+00	1.68E-02	442.2
1.00E+06	5.00E-03	15	11,495	5.50E-03	2.25E-01	1.80E-04	9.73E-03	0.00E+00	0.00E+00	9.73E-03	442.2
1.00E+06	5.00E-03	15	11,029	2.90E-03	1.19E-01	1.80E-04	1.12E-02	0.00E+00	0.00E+00	1.12E-02	442.2
1.00E+06	5.00E-03	15	11,098	2.25E-03	9.22E-02	1.80E-04	1.12E-02	0.00E+00	0.00E+00	1.12E-02	442.2
1.00E+06	5.00E-03	15	8,244	5.32E-05	2.18E-03	1.80E-04	1.31E-02	0.00E+00	0.00E+00	1.31E-02	442.2
1.00E+06	5.00E-03	15	12,217	7.56E-05	3.10E-03	1.80E-04	1.14E-02	0.00E+00	0.00E+00	1.14E-02	442.2
1.00E+06	5.00E-03	15	7,384	3.71E-05	1.52E-03	1.80E-04	2.00E-02	0.00E+00	0.00E+00	2.00E-02	442.2
1.00E+06	5.00E-03	15	7,977	5.29E-03	2.17E-01	1.80E-04	1.42E-02	0.00E+00	0.00E+00	1.42E-02	442.2
1.00E+06	5.00E-03	15	8,526	1.52E-03	6.24E-02	1.80E-04	4.82E-03	0.00E+00	0.00E+00	4.82E-03	442.2
1.00E+06	5.00E-03	15	7,592	3.90E-03	1.60E-01	1.80E-04	1.19E-02	0.00E+00	0.00E+00	1.19E-02	442.2
1.00E+06	5.00E-03	15	6,572	2.91E-02	1.19E+00	1.80E-04	1.68E-02	0.00E+00	0.00E+00	1.68E-02	442.2
1.00E+06	5.00E-03	15	7,716	2.90E-02	1.19E+00	1.80E-04	1.26E-02	0.00E+00	0.00E+00	1.26E-02	442.2
1.00E+06	5.00E-03	15	7,407	3.51E-03	1.44E-01	1.80E-04	1.68E-02	0.00E+00	0.00E+00	1.68E-02	442.2
1.00E+06	5.00E-03	15	4,578	8.57E-03	3.52E-01	1.80E-04	2.04E-02	0.00E+00	0.00E+00	2.04E-02	442.2
1.00E+06	5.00E-03	15	7,961	3.27E-01	1.34E+01	1.80E-04	1.08E-02	0.00E+00	0.00E+00	1.08E-02	442.2
1.00E+06	5.00E-03	15	9,994	7.43E-03	3.05E-01	1.80E-04	1.21E-02	0.00E+00	0.00E+00	1.21E-02	442.2
1.00E+06	5.00E-03	15	6,884	2.10E-03	8.62E-02	1.80E-04	1.63E-02	0.00E+00	0.00E+00	1.63E-02	442.2
1.00E+06	5.00E-03	15	10,245	4.88E-03	2.00E-01	1.80E-04	1.41E-02	0.00E+00	0.00E+00	1.41E-02	442.2
1.00E+06	5.00E-03	15	10,083	7.22E-03	2.96E-01	1.80E-04	1.24E-02	0.00E+00	0.00E+00	1.24E-02	442.2
1.00E+06	5.00E-03	15	10,657	1.33E-05	5.44E-04	1.80E-04	1.41E-02	0.00E+00	0.00E+00	1.41E-02	442.2
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	1.16E-02	0.00E+00	0.00E+00	1.16E-02	442.2
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	1.41E-02	0.00E+00	0.00E+00	1.41E-02	442.2
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	1.28E-02	0.00E+00	0.00E+00	1.28E-02	442.2
1.00E+06	5.00E-03	15	8,559	4.86E-04	1.99E-02	1.80E-04	1.37E-02	0.00E+00	0.00E+00	1.37E-02	442.2

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 15 FT BGS
INTERMEDIATE CALCULATIONS SHEET

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
15	1.00E+00	1.25	8.33E+01	9.80E-03	5.00E+03	1.21E+11	1.72E-04	1.72E-04	-	7.0E-03
15	1.00E+00	1.25	8.33E+01	1.12E-02	5.00E+03	5.42E+09	1.90E-04	1.90E-04	-	2.0E-01
15	1.00E+00	1.25	8.33E+01	1.68E-02	5.00E+03	2.87E+06	2.57E-04	2.57E-04	2.1E-05	7.0E-03
15	1.00E+00	1.25	8.33E+01	9.73E-03	5.00E+03	1.43E+11	1.71E-04	1.71E-04	-	7.0E-03
15	1.00E+00	1.25	8.33E+01	1.12E-02	5.00E+03	5.08E+09	1.91E-04	1.91E-04	-	3.5E-03
15	1.00E+00	1.25	8.33E+01	1.12E-02	5.00E+03	5.42E+09	1.90E-04	1.90E-04	1.1E-05	8.0E-01
15	1.00E+00	1.25	8.33E+01	1.31E-02	5.00E+03	2.05E+08	2.15E-04	2.15E-04	-	5.0E+00
15	1.00E+00	1.25	8.33E+01	1.14E-02	5.00E+03	3.35E+09	1.94E-04	1.94E-04	-	3.0E-02
15	1.00E+00	1.25	8.33E+01	2.00E-02	5.00E+03	2.60E+05	2.89E-04	2.89E-04	-	3.1E+01
15	1.00E+00	1.25	8.33E+01	1.42E-02	5.00E+03	4.29E+07	2.28E-04	2.28E-04	2.9E-05	3.0E-02
15	1.00E+00	1.25	8.33E+01	4.82E-03	5.00E+03	3.45E+22	9.48E-05	9.48E-05	3.7E-05	7.0E-02
15	1.00E+00	1.25	8.33E+01	1.19E-02	5.00E+03	1.33E+09	2.00E-04	2.00E-04	-	6.0E-02
15	1.00E+00	1.25	8.33E+01	1.68E-02	5.00E+03	2.87E+06	2.57E-04	2.57E-04	-	7.0E-01
15	1.00E+00	1.25	8.33E+01	1.26E-02	5.00E+03	4.08E+08	2.09E-04	2.09E-04	4.2E-05	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.68E-02	5.00E+03	2.87E+06	2.57E-04	2.57E-04	5.3E-06	9.8E-02
15	1.00E+00	1.25	8.33E+01	2.04E-02	5.00E+03	2.14E+05	2.92E-04	2.92E-04	-	9.0E-02
15	1.00E+00	1.25	8.33E+01	1.08E-02	5.00E+03	1.26E+10	1.85E-04	1.85E-04	-	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.21E-02	5.00E+03	9.01E+08	2.03E-04	2.03E-04	2.5E-06	1.0E+00
15	1.00E+00	1.25	8.33E+01	1.63E-02	5.00E+03	4.46E+06	2.52E-04	2.52E-04	1.0E-06	6.0E-01
15	1.00E+00	1.25	8.33E+01	1.41E-02	5.00E+03	5.25E+07	2.26E-04	2.26E-04	-	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.24E-02	5.00E+03	5.42E+08	2.07E-04	2.07E-04	-	1.0E-01
15	1.00E+00	1.25	8.33E+01	1.41E-02	5.00E+03	4.89E+07	2.27E-04	2.27E-04	-	3.0E+01
15	1.00E+00	1.25	8.33E+01	1.16E-02	5.00E+03	2.13E+09	1.97E-04	1.97E-04	5.9E-06	2.7E-01
15	1.00E+00	1.25	8.33E+01	1.41E-02	5.00E+03	5.25E+07	2.26E-04	2.26E-04	-	5.0E+00
15	1.00E+00	1.25	8.33E+01	1.28E-02	5.00E+03	3.17E+08	2.11E-04	2.11E-04	2.0E-06	2.0E-03
15	1.00E+00	1.25	8.33E+01	1.37E-02	5.00E+03	7.97E+07	2.23E-04	2.23E-04	-	2.0E-01

END

APPENDIX
USEPA JOHNSON AND ETTINGER MODEL SPREADSHEETS FOR 15 FT BGS
RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

COPC	Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)	REMEDIAL GOALS: Carcinogen ($\mu g/m^3$)	Noncarcinogen ($\mu g/m^3$)	Minimum ($\mu g/m^3$)
1,2,4-Trimethylbenzene	-	5.6E-06	-	1.78E+05	1.78E+05
1,2-Dichlorobenzene	-	2.2E-07	-	4.60E+06	4.60E+06
1,2-Dichloroethane	4.4E-10	8.4E-06	2.27E+03	1.19E+05	2.27E+03
1,3,5-Trimethylbenzene	-	5.6E-06	-	1.79E+05	1.79E+05
1,3-Dichlorobenzene	-	1.2E-05	-	8.03E+04	8.03E+04
1,4-Dichlorobenzene	1.7E-10	5.4E-08	5.85E+03	1.84E+07	5.85E+03
2-Butanone (methyl ethyl ketc	-	9.8E-09	-	1.02E+08	1.02E+08
2-Hexanone	-	1.5E-06	-	6.79E+05	6.79E+05
Acetone	-	2.1E-09	-	4.68E+08	4.68E+08
Benzene	5.4E-10	1.7E-06	1.85E+03	5.76E+05	1.85E+03
Bromodichloromethane	2.9E-10	3.1E-07	3.50E+03	3.24E+06	3.50E+03
c-1,2-Dichloroethene	-	7.6E-07	-	1.31E+06	1.31E+06
Carbon disulfide	-	8.4E-08	-	1.19E+07	1.19E+07
Carbon tetrachloride	7.2E-10	4.8E-07	1.40E+03	2.10E+06	1.40E+03
Chloroform	1.1E-10	6.0E-07	9.01E+03	1.67E+06	9.01E+03
Chloromethane	-	7.4E-07	-	1.35E+06	1.35E+06
Dichlorodifluoromethane (Fre	-	4.2E-07	-	2.37E+06	2.37E+06
Ethylbenzene	4.1E-11	4.6E-08	2.42E+04	2.16E+07	2.42E+04
Methylene chloride	2.1E-11	9.6E-08	4.87E+04	1.04E+07	4.87E+04
o-Xylene	-	5.2E-07	-	1.93E+06	1.93E+06
p/m-Xylene	-	4.7E-07	-	2.12E+06	2.12E+06
Tert-Butyl Alcohol (TBA)	-	1.7E-09	-	5.79E+08	5.79E+08
Tetrachloroethene (PCE)	9.5E-11	1.7E-07	1.06E+04	6.04E+06	1.06E+04
Toluene	-	1.0E-08	-	9.67E+07	9.67E+07
Trichloroethene	3.4E-11	2.4E-05	2.91E+04	4.15E+04	2.91E+04
Vinyl acetate	-	2.5E-07	-	3.93E+06	3.93E+06