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November 25, 2008

Mr. Joseph Malen
Directorate of Public Works
Building 3023
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Subject: Soil Gas Sampling Results and Plans for Additional Sampling
Former Communications Site (Taku Gardens)

Mr. Malen:

The attached technical memorandum summarizes the success of the modified TO-15, solvent delay method in achieving lower detection limits for chemicals of potential concern at the site.

We understand that another round of sub-slab soil gas sampling is planned. Based on the success of this modified method and the limited timeframe in which we have to collect, analyze, validate, evaluate, and report on the results associated with these samples, we would like to proceed immediately with the next round of sampling.

Please let me know if you have any concerns or questions.

Sincerely,

CH2M HILL

Jeremy Blei

Attachment: Technical Memorandum, October 2008 Sub-Slab Soil Gas/
Ambient Air Investigation

C: Robert Brock, U.S. Army Corps of Engineers

October 2008 Sub-Slab Soil Gas/Ambient Air Investigation, Former Communications Site (Taku Gardens), Fort Wainwright, Alaska

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PREPARED BY:	CH2M HILL
COPIES:	U.S. Army, Directorate of Public Works, Fort Wainwright
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CONTRACT NUMBER:	W9128A-08-D-0007

1.0 Introduction

This technical memorandum describes the field activities and results from sub-slab and indoor air samples that were collected the week of September 29, 2008, at the Former Communications Site (FCS Taku Gardens), Fort Wainwright, Alaska. The investigation was conducted in accordance with the *Work Plan for Fall 2008 Remedial Investigation Activities, Former Communications Site (Taku Gardens), Fort Wainwright, Alaska* (Work Plan) (CH2M HILL 2008a). There were two primary purposes for this study: (1) to assess whether soil-gas data of acceptable quality could be collected to provide chemical-concentration data for the baseline risk assessment, and (2) to determine whether the results are suitable to estimate the degree of attenuation between sub-slab soil gas and indoor air quality. This technical memorandum specifically addresses the first objective, and reports on the modifications to the analytical methodology to allow improvement in lowering method detection limits for target analytes.

1.1 Background Information

The historical activities at FCS include chemical spills from maintenance practices; leaks from tanks, pipelines, and transformers; and burial of drums and other debris. Therefore, it is necessary to assess whether volatile contaminant exposure through vapor intrusion poses a potential for unacceptable risk to human health. Inhalation risk estimates and additional information on exposure pathways are included in the Work Plan, Section 3.4.3 (CH2M HILL 2008a). The migration of volatile organic compounds (VOCs) from underlying, contaminated soil to indoor air is described as vapor intrusion and is the migration pathway that was investigated.

Preliminary Source Evaluation Phase II Investigation

A passive soil gas investigation was conducted at the FCS in 2006 as part of the *Preliminary Source Evaluation (PSE) Phase II Investigation* (Northwind, 2007). The 2006 soil gas investigation was conducted in the northwest potion of the site and near Building 49. It

consisted of passive soil gas samples collected in 35 locations using Gore™ Sorber technology. The sample locations selected in the PSE II Investigation were generally widespread within the northwest portion of the site to confirm the presence or absence of VOCs and not to define nature and extent. Petroleum-derived constituents (total petroleum hydrocarbons [TPH]; C-11, C-13, and C-15 hydrocarbons; naphthalenes; and trimethylbenzenes) were detected in almost all sample locations (33 of 35), suggesting these compounds were ubiquitous throughout the area investigated. Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds were detected less frequently (6 of 35 locations) along the northern border of the FCS. Of the chlorinated solvents, only trichloroethene (TCE) and tetrachloroethane (PCE) were detected, and they appeared in fewer locations than petroleum constituents (5 of 35 locations). The source of the PCE and TCE was assumed to be solvent used at the former motor pool. Tentatively identified compounds (TICs) detected appeared to be limited to chlorofluorocarbons (CFCs). The CFC source is suspected to be associated with building materials (insulation) and is believed to be unrelated to the petroleum source. The sample results from the PSE II Investigation are qualitative and cannot be used to determine actual concentrations of VOCs in a given location.

Remedial Investigation 2007 Sampling

CH2M HILL conducted active soil-gas sampling in 2007 to evaluate the nature and extent of VOCs in soil and provide a preliminary indication of the potential for vapor intrusion. A total of 110 semi-permanent, sub-slab, soil-gas probes were installed in the 55 constructed duplexes at the FCS. The sub-slab sampling points were installed in the garages of each duplex (two per duplex). The sub-slab sampling points were installed and sampled in accordance with the procedures described in the *Draft RI Work Plan, Addendum 3* (CH2M HILL, 2008b). The sampling was performed over two periods: August 22 to 30, 2007, and October 11 to 26, 2007. Six analytes detected in soil gas were identified as contaminants of potential concern (COPCs) for indoor air, based on comparison of the soil gas data to the project screening levels (ref). Twenty-two additional analytes were undetected but had method detection limits (MDLs) that exceeded the risk-based screening level. The MDLs for many of these analytes were elevated due to the unanticipated presence of high levels of Freon-related compounds in the soil gas. These Freon compounds were not considered target analytes for the RI; however, their presence required increased dilution during analysis, resulting in elevated detection limits for target compounds. As such, uncertainty was introduced with the levels of detection and interferences encountered during the initial soil gas investigation. As a result if these uncertainties, this additional investigation in 2008 was conducted to determine if the inference of the Freon compounds could be overcome, if lower MDLs could be achieved, and if additional data collection would help in evaluating the potential presence of compounds that could not be detected previously.

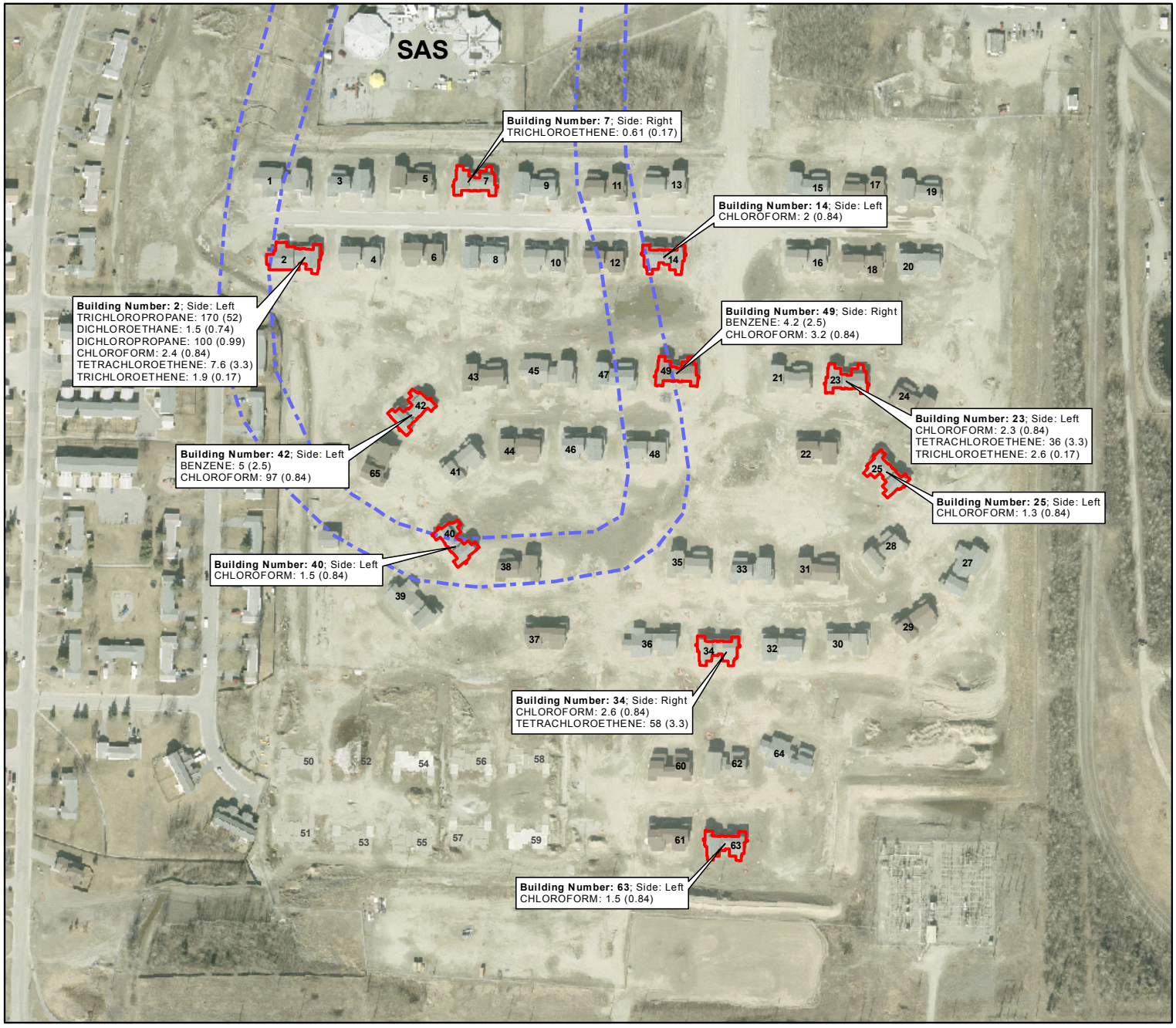
1.2 October 2008 Sample Locations

Ten pairs of sub-slab/indoor air samples and one pair of field duplicates were collected. The sample locations were selected to provide coverage of all FCS subareas. Table 1 lists the sampling locations and sampling rationale. The sample locations are shown on Figure 1.

TABLE 1
Sample Locations and Sample Rationale

Subarea	Field Location ID	Physical Address	Sample ID	Sample Type	Sample Rationale
A	SG023-L	4742-1	08FWASG023S	Sub-slab	Previous sample was diluted 371 times
A	SG023-LIA	4742-1	08FWAIA023S	Indoor Air	Corresponding indoor air sample
A	SG014-L	4710-1	08FWBSG014S	Sub-slab	Over TCE/PCE Plume
A	SG014-LIA	4710-1	08FWBIA014S	Indoor Air	Corresponding indoor air sample
A	SG034-R	4735-2	08FWASG034S	Sub-slab	Previous sample 300 µg/m^3 PCE
A	SG034-RIA	4735-2	08FWAIA034S	Indoor Air	Corresponding indoor air sample
A	SG049-R	4724-2	08FWASG049S	Sub-slab	Drums under house
A	SG049-RIA	4724-2	08FWAIA049S	Indoor Air	Corresponding indoor air sample
A	SG025-L	4745-1	08FWASG025S	Sub-slab	Previous sample had Benzene and Xylene
A	SG025-LIA	4745-1	08FWAIA025S	Indoor Air	Corresponding indoor air sample
B	SG007-R	4717-2	08FWBSG007S	Sub-slab	Over POL source area
B	SG007-RIA	4717-2	08FWBIA007S	Indoor Air	Corresponding indoor air sample
C	SG002-L	4722-1	08FWCSG002S	Sub-slab	Previous sample was diluted 12 times
C	SG002-LIA	4722-1	08FWCIA002S	Indoor Air	Corresponding indoor air sample
U	SG042-L	4728-1	08FWFSG042S	Sub-slab	Previous sample Chloroform 170 µg/m^3
U	SG042-LIA	4728-1	08FWFIA042S	Indoor Air	Corresponding indoor air sample
E	SG040-L	4751-1	08FWESG040S	Sub-slab	Possible control sample
E	SG040-LIA	4751-1	08FWEIA040S	Indoor Air	Corresponding indoor air sample
D	SG063-L	4760-1	08FWDSG063S	Sub-slab	Previous sample Benzene
D	SG063-LIA	4760-1	08FWDIA063S	Indoor Air	Corresponding indoor air sample
Field Duplicate	SG023-L	4742-1	08FWASG023S	Sub-slab field duplicate	Previous sample was diluted 371 times
Field Duplicate	SG023-LIA	4742-1	08FWAIA023S	Indoor Air field duplicate	Corresponding indoor air sample
Ambient Air Sample (on fence)	West Fenceline	Fence	08FWAAA-FENCE	Background	Ambient contributions

µg/m^3 = micrograms per cubic meter
TCE = trichloroethene
PCE = tetrachloroethene
POL = Petroleum, oil, and lubricant



LEGEND

Building Sampled For Sub-slab Soil Gas and Indoor Ambient Air (results in µg/m^3)

Former Hoppe's Slough

(0.84) Screening Level, EPA Region 6 Ambient Air Screening Level x 10

0 375
Feet

N

FIGURE 1
October 2008 Sub-slab Soil Gas Screening Level Exceedances
Former Communications Site
Fort Wainwright, Alaska

CH2MHILL

File Path: \\simba\Proj\USArmyCorpsOfEnginee\357465TakuGardens\GIS\MapFiles\SoilGas_TechMemo_2008\SoilGasSampleLocs_Results.mxd, Date: November 18, 2008 9:28:31 AM

One outdoor ambient air sample was taken to determine the degree of contribution of VOCs from regional background sources (such as, airport, power plant, gas station, etc.). The sample location was on the western fence line, as in the prior sampling rounds.

The windows and doors had not been opened at the duplexes for approximately 2 years, creating the possibility of unrealistic indoor air quality that is not representative of normal conditions. To help mitigate this, 6 days prior to sampling, each location was vented by opening windows for 24 hours to remove stagnant air. This occurred on Wednesday, September 24, 2008, through Thursday, September 25, 2008.

To further simulate normal living conditions (and account for potential stack effects caused by indoor/outdoor temperature differentials), the heating systems at each duplex were to be adjusted to 68 degrees Fahrenheit (°F) 7 days prior to sampling. However, although the thermostat appeared to be on, indoor temperatures during sampling were found to be 45 to 50°F downstairs and 43 to 47°F upstairs, well below typical living conditions.

1.3 Field Sample Collection Procedures

The sub-slab sampling points installed in the garages of each duplex building in 2007 were used for this event. Sub-slab samples were collected over a 30-minute period. Sub-slab sampling points were leak-tested using a helium leak-check procedure before sampling. Three locations (40L, 34R, and 25L) exceeded the leak criterion of 1 percent and had to be resealed before being sampled.

Indoor and outdoor air samples were collected over a 24-hour period. Indoor air sample canisters were placed on top of the post at the bottom of the stairs (at breathing level height) in the same duplex unit from which the sub-slab samples were collected.

1.4 Analytical Method

Both the ambient and sub-slab samples were analyzed by U.S. Environmental Protection Agency (USEPA) Method TO-15 using a mass spectrometer in both Low Level Scan and Selective Ion Monitoring (SIM) modes. Modifications to the method were made by using a solvent delay approach to help mitigate potential Freon interferences. A solvent delay is the period of time at the beginning of a mass spectrometer (MS) analysis prior to when the detector is turned on. The Freons noticed in prior rounds of sampling have low boiling points and eluted very close to the solvent delay. Therefore, during this investigation the solvent delay was extended to just past the point where Freons elute, to minimize their negative effect on the detector and to decrease the need for sample dilutions. The net goal was increased detectability and resolution of the target analytes. A consequence of the solvent delay is that it eliminates the ability to quantify the concentrations of Freon compounds that may have been present in the sample.

The initial plan for analysis involved the combined Low-Level Scan and SIM as one sample run; however, upon receipt and review of preliminary data, it was found that elevated MDLs resulted for several target analytes. Fortunately, the laboratory was still able to run a separate modified TO-15 analysis to achieve lower MDLs for these compounds.

2.0 Results

2.1 Evaluation of Adequacy of Detection Limits

Soil-gas data of acceptable quality were collected during this study. Table 2 provides a summary comparison of the reported detection limits with the project screening levels[1] for each of the 52 target analytes. There were only a few analytes with detection limits exceeding the project screening levels; however, for the majority of compounds, the modifications made to the analytical method provided chemical-concentration data suitable for use in a risk assessment. Figure 1 shows sub-slab exceedances of the screening levels at each duplex.

Only four compounds had MDLs greater than the screening level. These were 1,1,1,2-tetrachloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, and 1,2-dibromoethane. Overall, data quality was acceptable and no data were rejected due to quality control failures. See the attached Data Validation Report for more information on data quality.

Chloromethane was not reported because, due to its volatility, its elution occurs prior to the end of the solvent delay and start of the data acquisition. However, this chemical has not been prevalent above screening levels in other site media. Several compounds do not have reported MDLs because the compounds are non-standard and the MDL study was not performed before analysis. For 1,1,1,2-tetrachloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, bromobenzene, and 4-isopropyltoluene, the reporting limit was used for comparison against the screening levels and not the MDL. Of these, only 1,1,1,2-tetrachloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane exceeded the screening level.

In the 2008 sampling event, 92 percent of the MDLs were reported to be less than screening levels, indicating acceptable performance. By comparison, during the 2007 sampling event, approximately 68 percent of the MDLs were reported to be less than screening levels. This demonstrates a marked improvement as a result of the solvent delay method employed. It is anticipated that in future events, this acceptable percentage should be even higher if a MDL study is conducted for specific problem compounds.

Prior to any future analyses, an MDL study is recommended for all of the chemicals for which limitations were observed during the October sampling event. In addition, for those constituents with MDLs above screening levels, the application of analysis via SIM mode will be explored.

[1] Project screening levels are 10-fold the USEPA Region 6 Screening Levels for ambient air (CH2M HILL 2008c).

TABLE 2
Screening Level Exceedances
Vapor Intrusion Evaluation; Taku Gardens–Fairbanks, AK

Analyte Name	Sample Matrix	Result Units	Number of Detects	Number of Samples	Frequency of Detection (%)	Screening Level[a]	Number of Detects > SL	Number of MDL > SL[b]
1,1,1,2-Tetrachloroethane	SG	UG/M3	0	12	0.00	2.6		12
1,1,1-Trichloroethane	SG	UG/M3	12	12	100.00	23000	0	
1,1,2,2-Tetrachloroethane	SG	UG/M3	2	12	16.67	0.33	0	0
1,1,2-Trichloroethane	SG	UG/M3	2	12	16.67	1.2	0	0
1,1-Dichloroethane	SG	UG/M3	6	12	50.00	7300	0	0
1,1-Dichloroethene	SG	UG/M3	11	12	91.67	2100	0	0
1,2,3-Trichloropropane	SG	UG/M3	1	12	8.33	0.0096	1	11
1,2,4-Trichlorobenzene	SG	UG/M3	1	12	8.33	42	0	0
1,2,4-Trimethylbenzene	SG	UG/M3	9	12	75.00	63	0	0
1,2-Dibromo-3-chloropropane	SG	UG/M3	0	12	0.00	0.001		12
1,2-Dibromoethane	SG	UG/M3	0	12	0.00	0.034		12
1,2-Dichlorobenzene	SG	UG/M3	2	12	16.67	2.5	0	0
1,2-Dichloroethane	SG	UG/M3	5	12	41.67	0.74	1	0
1,2-Dichloropropane	SG	UG/M3	1	12	8.33	0.99	1	0
1,3,5-Trimethylbenzene	SG	UG/M3	5	12	41.67	62	0	0
1,3-Dichlorobenzene	SG	UG/M3	0	12	0.00	83		0
1,4-Dichlorobenzene	SG	UG/M3	2	12	16.67	2.8	0	0
2-Butanone	SG	UG/M3	12	12	100.00	52000	0	
2-Hexanone	SG	UG/M3	5	12	41.67			
4-Isopropyltoluene	SG	UG/M3	0	12	0.00			
4-Methyl-2-pentanone	SG	UG/M3	4	12	33.33	31000	0	0
Acetone	SG	UG/M3	5	12	41.67	33000	0	0
Benzene	SG	UG/M3	3	12	25.00	2.5	2	0
Bromobenzene	SG	UG/M3	0	12	0.00	120		0
Bromodichloromethane	SG	UG/M3	0	12	0.00	1.1		0
Bromoform	SG	UG/M3	0	12	0.00	17		0
Bromomethane	SG	UG/M3	1	12	8.33	52	0	0
Carbon disulfide	SG	UG/M3	11	12	91.67	7300	0	0
Carbon tetrachloride	SG	UG/M3	12	12	100.00	1.3	0	
Chlorobenzene	SG	UG/M3	2	12	16.67	520	0	0

TABLE 2
Screening Level Exceedances
Vapor Intrusion Evaluation; Taku Gardens–Fairbanks, AK

Analyte Name	Sample Matrix	Result Units	Number of Detects	Number of Samples	Frequency of Detection (%)	Screening Level[a]	Number of Detects > SL	Number of MDL > SL[b]
Chloroethane	SG	UG/M3	0	12	0.00			
Chloroform	SG	UG/M3	12	12	100.00	0.84	10	
cis-1,2-Dichloroethene	SG	UG/M3	1	12	8.33	370	0	0
cis-1,3-Dichloropropene	SG	UG/M3	0	12	0.00			
Dibromochloromethane	SG	UG/M3	0	12	0.00	0.8		0
Ethylbenzene	SG	UG/M3	12	12	100.00	11000	0	
Hexachlorobutadiene	SG	UG/M3	0	12	0.00	0.87		0
Isopropylbenzene	SG	UG/M3	4	12	33.33	4000	0	0
m,p-Xylene	SG	UG/M3	12	12	100.00	1000	0	
Methylene chloride	SG	UG/M3	3	12	25.00	41	0	0
Methyl-tert-butyl ether (MTBE)	SG	UG/M3	0	12	0.00	74		0
Naphthalene	SG	UG/M3	1	12	8.33	31	0	0
n-Propylbenzene	SG	UG/M3	4	12	33.33	370	0	0
o-Xylene	SG	UG/M3	5	12	41.67	7300	0	0
Styrene	SG	UG/M3	1	12	8.33	11000	0	0
Tetrachloroethene (PCE)	SG	UG/M3	12	12	100.00	3.3	3	
Toluene	SG	UG/M3	8	12	66.67	52000	0	0
trans-1,2-Dichloroethene	SG	UG/M3	4	12	33.33	630	0	0
trans-1,3-Dichloropropene	SG	UG/M3	0	12	0.00			
Trichloroethene (TCE)	SG	UG/M3	4	12	33.33	0.17	3	0
Trichlorofluoromethane	SG	UG/M3	12	12	100.00	7300	0	
Vinyl chloride	SG	UG/M3	1	12	8.33	1.6	0	0
Xylene (calculated total)	SG	UG/M3	11	11	100.00			

[a]Screening level is Region 6 Ambient Air Screening Level 10
[b]for 1,1,1,2-tetrachloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, bromobenzene and 4-isopropyltoluene this is the RL, not the MDL

3.0 Conclusions

The modifications to the analytical methodology allowed significant improvement in lowering method detection limits for target analytes by minimizing Freon interferences and subsequent dilution of target compounds. In the 2008 sampling event, 92 percent of the MDLs were reported to be less than project screening levels, indicating acceptable performance. Although not all analytes met respective screening levels, this data set shows that it is possible in future sub-slab sampling events to collect data with increased detectability and resolution of the target analytes, which can be used effectively to assess human health risk.

4.0 References

CH2M HILL. 2008a. *Work Plan for Fall 2008 Remedial Investigation Activities, Former Communications Site (Taku Gardens), Fort Wainwright, Alaska.* September 23.

CH2M HILL. 2008b. *Revised Interim Draft Remedial Investigation Management Plan*. January.

CH2M HILL. 2008c. *Preliminary Risk Screening Evaluation Report, FWA 102 Former Communications Site, Fort Wainwright, Alaska.* April.

Northwind, Inc. 2007. *Preliminary Source Evaluation II Report. Taku gardens, Fort Wainwright, Alaska (Final)*.

Attachment 1
Data Validation Report

Fort Wainwright, Taku Gardens
Soil Gas and Indoor Air Sampling
October 2008
Data Quality Evaluation Report

Introduction

The objective of this Data Quality Evaluation (DQE) report is to assess the data quality of analytical results for soil gas collected from the Taku Gardens housing development at Fort Wainwright in Fairbanks, Alaska. Samples were collected in support of the Fort Wainwright Remedial Investigation at the Taku Gardens Former Communications Site. Individual method requirements and guidelines from the Quality Assurance Program Plan, Taku Gardens Former Communications Site, Fort Wainwright, Alaska, July 2007 (Taku QAPP) were used in this assessment.

This report is intended as a general data quality assessment designed to summarize data issues.

Analytical Data

This DQE report covers 10 normal soil gas samples, 10 normal indoor air samples, one soil gas field duplicate (FD), one indoor air FD, and one ambient air sample. All samples were collected on October 1 and October 2, 2008. The samples were analyzed for volatile organic compounds by methods TO-15 and TO-15SIM. The analyses were performed by AirToxics Ltd. in Folsom, California. Samples were collected and shipped by overnight carrier to the laboratory for analysis.

These samples were reported under six sample delivery groups (SDG) listed in Table 1.

Table 1
Sample Delivery Groups

0810184A
0810184B
0810184C
0810186A
0810186B
0810186C

Approximately 90 percent of the data were validated per Level III data validation requirements which includes a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required quality control (QC) samples at the specified frequencies; (4) method blanks; (5) laboratory control sample/laboratory control sample duplicates (LCS/LCSD); (6) surrogate spike recoveries for organic analyses; (7) matrix spike/matrix spike

duplicate (MS/MSD) samples; and (8) initial and continuing calibration information and other method-specific criteria as defined by the Taku QAPP.

Approximately 10 percent of the data underwent a further Level IV validation which included all of the items in the Level III validation plus: (1) review of sample chromatograms; (2) verification of analyte identification; and, (3) verification of calculations for the data which included back-calculating from the initial and continuing calibrations to confirm the reported result.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of FDs.

Data flags were assigned according to the Taku QAPP. These flags, as well as the reason for each flag, are entered into the electronic database and can be found in Table 3. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes matrix and blank sample impacts.

The data flags are those listed in the Taku QAPP and are defined below:

- J = Analyte was present but the reported value may not be accurate or precise.
- J+ = Analyte was present but the reported value may be biased high.
- J- = Analyte was present but the reported value may be biased low.
- R = The result was rejected due to deficiencies in the ability to analyze the sample and meet QC criteria.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections and Table 3.

Also included as documentation of data validation findings are the Alaska Department of Environmental Conservation Laboratory Data Review Checklists (version 2.4, August 2007). A checklist is provided for each laboratory SDG. The checklists can be found in a separate appendix to this report.

Holding Times

All holding-time criteria were met.

Method Modification

During the 2007 soil gas sampling event, significant Freon interference was observed in the soil gas samples. This resulted in sample dilutions that raised reporting limits (RL) above project objectives. In order to avoid this issue during the 2008 event and obtain lower RLs, the samples were analyzed with a modification to the TO-15 and TO-15-SIM methods. A solvent delay was employed to start data acquisition after elution of the interfering Freon peaks. The result was elimination of the Freon interference, samples were analyzed with no dilution. This modification did result in the loss of chloromethane data because elution time was prior to the start of data acquisition.

Calibration

All initial and continuing calibration criteria were met with the following exceptions:

The initial calibrations of the following analytes were performed as three-point calibrations instead of the QAPP-required five-point calibration for method TO-15: 1,1,1,2-tetrachloroethane; 1,2,3-trichloropropane; 1,2-dibromo-3-chloropropane; p-cymene (4-isopropyltoluene); and, bromobenzene. Additionally, method detection limit (MDL) studies were not performed for these five analytes so MDLs are not available. Two associated detected results were qualified as estimated and flagged "J"; 113 associated non-detected results were qualified as estimated and flagged "UJ". The calibration criteria were met for the three-point calibrations, and the concentration of the low calibration standard was equal to the laboratory RL, thus the data are sufficient to determine the presence or absence of these five analytes. Th laboratory noted these analytes were not on their standard analytes list but these specific variances from the Taku QAPP were not submitted for approval prior to sample collection and analysis.

The initial calibration percent relative standard deviation (RSD) was above criteria for trichlorofluoromethane. Three associated detected results were qualified as estimated and flagged "J".

The recovery of 1,2-dibromo-3-chloropropane was below Taku QAPP criteria in the continuing calibration verification (CCV) standards, indicating associated sample results are possibly biased low. Eight associated non-detected results were qualified as estimated and flagged "UJ".

Method Blanks

Method blanks were analyzed at the required frequency and were generally free of contamination.

Five analytes were detected below the RL in the method blanks for method TO-15. Thirty-one associated sample results were detected less than five times (10 times for common laboratory contaminants) the blank concentrations and were qualified as not detected. Results detected above the RL were flagged "U" at the detected concentration and results detected below the RL were flagged "U" at the RL.

Four analytes were detected below the RL in the method blanks for method TO-15-SIM. Thirty-five associated sample results were detected less than five times the blank concentrations and were qualified as not detected. Results detected above the RL were flagged "U" at the detected concentration and results detected below the RL were flagged "U" at the RL.

Field Blanks

One ambient blank, 08FWAAA-Fence, was collected with the soil gas samples. Several analytes were detected in the ambient blank and are presented in Table 2.The ambient blank detected results suggest that the ambient air may have contributed to sample detected results. Data were not qualified for ambient air detections.

Table 2
Ambient Air Sample Detections

Analyte	Result (ug/m3)	Lab Flag
ACETONE	28	
2-BUTANONE	12	
FREON 11	1.4	
CARBON DISULFIDE	3.6	
M,P-XYLENE	2.8	
O-XYLENE	1.1	
CARBON TETRACHLORIDE	0.61	
BENZENE	1.8	
1,2,4-TRIMETHYLBENZENE	0.95	
TOLUENE	5.4	
ETHYL BENZENE	0.98	
NAPHTHALENE	0.51	J
1,2,4-TRICHLOROBENZENE	0.38	J
1,4-DICHLOROBENZENE	0.19	J
CUMENE	0.2	J
STYRENE	0.23	J
METHYLENE CHLORIDE	0.93	J
BROMOMETHANE	0.59	J
1,3,5-TRIMETHYLBENZENE	0.35	J
TRICHLOROETHENE	0.056	J
1,2-DICHLOROETHANE	0.033	J
1,1,1-TRICHLOROETHANE	0.067	J
TETRACHLOROETHENE	0.2	J
PROPYLBENZENE	0.33	J
CHLOROFORM	0.12	J

Field Duplicates

Two FD sets were collected. Precision was generally acceptable.

The FD relative percent differences (RPD) of acetone and 2-butanone were above Taku QAPP criteria in FD set 08FWASG023S/08FWASG023SB for method TO-15. Four associated detected results in the normal and duplicate were qualified as estimated and flagged “J”.

The FD RPDs of chloroform and tetrachloroethene were above Taku QAPP criteria in FD set 08FWASG023S/08FWASG023SB for method TO-15-SIM. Four associated detected results in the normal and duplicate were qualified as estimated and flagged “J”.

Laboratory Duplicates

Laboratory duplicates were analyzed as required. All precision criteria were met.

Surrogates

Surrogates were added to all samples and laboratory QC. All surrogate recoveries met criteria.

Laboratory Control Samples

LCS/LCSDs were analyzed as required. Accuracy and precision were acceptable with the following exceptions.

Five analytes were not included in the LCS/LCSD for method TO-15: 1,1,1,2-tetrachloroethane; 1,2,3-trichloropropane; 1,2-dibromo-3-chloropropane; p-cymene (4-isopropyltoluene); and, bromobenzene. A QC sample from a separate source than the initial calibration was not analyzed to demonstrate accuracy. Two associated detected results were qualified as estimated and flagged "J"; 113 associated non-detected results were qualified as estimated and flagged "UJ".

Internal Standards

All internal standard acceptance criteria were met.

Chain of Custody

No discrepancies were noted.

Overall Assessment

The final activity in the data quality evaluation is an assessment of whether the data meet the data quality objectives. The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision making process. The precision, accuracy, representativeness, completeness and comparability are addressed in the Taku QAPP. The following summary highlights the data evaluation findings for the above defined events:

1. No data were rejected and completeness was 100 percent for all methods.
2. Approximately four percent of the TO-15 data, and eight percent of the TO-15-SIM data were qualified because of low-level method blank contamination. The degree to which laboratory blank contamination was observed is within reasonable method expectations considering the very low detection levels for the project.
3. An ambient air sample was collected with the soil gas samples. Detections in the ambient air sample suggest ambient air concentrations may have contributed to detections in the soil gas samples.
4. A modification to methods TO-15 and TO-15-SIM was performed to eliminate Freon interference.
5. Initial calibration percent RSD and CCV recovery exceedances were observed.
6. FD RPD exceedances were observed in one FD set.

7. All data for five analytes by method TO-15 are considered estimated: 1,1,1,2-tetrachloroethane; 1,2,3-trichloropropane; 1,2-dibromo-3-chloropropane; p-cymene (4-isopropyltoluene); and, bromobenzene.. These five analytes are not part of the laboratory's standard analytes list. MDLs were not available, a three-point initial calibration was performed instead of the QAPP-required five-point calibration, and they were not spiked in the LCS/LCSDs. The data are considered sufficient to determine the presence or absence of these analytes.
8. Overall the precision and accuracy of the data, as measured by field and laboratory QC indicators, suggest that the Taku QAPP goals have been met.

Table 3 – Validation Flags

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWAAA-FENCE	TO-15	1,1,1,2-TETRACHLOROETHANE	5.6	UG/M3	UJ	NoLCS
08FWAAA-FENCE	TO-15	1,1,1,2-TETRACHLOROETHANE	5.6	UG/M3	UJ	3-pointICAL
08FWAAA-FENCE	TO-15	1,2,3-TRICHLOROPROPANE	4.9	UG/M3	UJ	NoLCS
08FWAAA-FENCE	TO-15	1,2,3-TRICHLOROPROPANE	4.9	UG/M3	UJ	3-pointICAL
08FWAAA-FENCE	TO-15	1,2,4-TRICHLOROBENZENE	6.1	UG/M3	U	LB<RL
08FWAAA-FENCE	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.9	UG/M3	UJ	CCV<LCL
08FWAAA-FENCE	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.9	UG/M3	UJ	NoLCS
08FWAAA-FENCE	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.9	UG/M3	UJ	3-pointICAL
08FWAAA-FENCE	TO-15	1,2-DICHLOROBENZENE	0.99	UG/M3	U	LB<RL
08FWAAA-FENCE	TO-15	1,3-DICHLOROBENZENE	0.99	UG/M3	U	LB<RL
08FWAAA-FENCE	TO-15	BROMOBENZENE	5.3	UG/M3	UJ	3-pointICAL
08FWAAA-FENCE	TO-15	BROMOBENZENE	5.3	UG/M3	UJ	NoLCS
08FWAAA-FENCE	TO-15	NAPHTHALENE	4.3	UG/M3	U	LB<RL
08FWAAA-FENCE	TO-15	P-CYMENE	4.5	UG/M3	UJ	NoLCS
08FWAAA-FENCE	TO-15	P-CYMENE	4.5	UG/M3	UJ	3-pointICAL
08FWAAA-FENCE	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.22	UG/M3	U	LB<RL
08FWAAA-FENCE	TO-15-SIM	TETRACHLOROETHENE	0.2	UG/M3	J	LB<RL
08FWAAA-FENCE	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.65	UG/M3	U	LB<RL
08FWAAA-FENCE	TO-15-SIM	TRICHLOROETHENE	0.18	UG/M3	U	LB<RL
08FWAIA023S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.8	UG/M3	UJ	3-pointICAL
08FWAIA023S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.8	UG/M3	UJ	NoLCS
08FWAIA023S	TO-15	1,2,3-TRICHLOROPROPANE	5.1	UG/M3	UJ	3-pointICAL
08FWAIA023S	TO-15	1,2,3-TRICHLOROPROPANE	5.1	UG/M3	UJ	NoLCS
08FWAIA023S	TO-15	1,2,4-TRICHLOROBENZENE	6.2	UG/M3	U	LB<RL
08FWAIA023S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	8.1	UG/M3	UJ	NoLCS
08FWAIA023S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	8.1	UG/M3	UJ	CCV<LCL
08FWAIA023S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	8.1	UG/M3	UJ	3-pointICAL
08FWAIA023S	TO-15	1,2-DICHLOROBENZENE	1	UG/M3	U	LB<RL
08FWAIA023S	TO-15	1,3-DICHLOROBENZENE	1	UG/M3	U	LB<RL
08FWAIA023S	TO-15	BROMOBENZENE	5.4	UG/M3	UJ	NoLCS
08FWAIA023S	TO-15	BROMOBENZENE	5.4	UG/M3	UJ	3-pointICAL
08FWAIA023S	TO-15	NAPHTHALENE	4.4	UG/M3	U	LB<RL
08FWAIA023S	TO-15	P-CYMENE	4.6	UG/M3	UJ	NoLCS
08FWAIA023S	TO-15	P-CYMENE	4.6	UG/M3	UJ	3-pointICAL
08FWAIA023S	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.23	UG/M3	U	LB<RL
08FWAIA023S	TO-15-SIM	TETRACHLOROETHENE	0.09	UG/M3	J	LB<RL
08FWAIA023S	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.67	UG/M3	U	LB<RL
08FWAIA023S	TO-15-SIM	TRICHLOROETHENE	0.18	UG/M3	U	LB<RL
08FWAIA023SB	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	3-pointICAL
08FWAIA023SB	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	NoLCS
08FWAIA023SB	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	3-pointICAL
08FWAIA023SB	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	NoLCS
08FWAIA023SB	TO-15	1,2,4-TRICHLOROBENZENE	5.9	UG/M3	U	LB<RL
08FWAIA023SB	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	3-pointICAL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWAIA023SB	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	NoLCS
08FWAIA023SB	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	CCV<LCL
08FWAIA023SB	TO-15	1,2-DICHLOROBENZENE	0.95	UG/M3	U	LB<RL
08FWAIA023SB	TO-15	1,3-DICHLOROBENZENE	0.95	UG/M3	U	LB<RL
08FWAIA023SB	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	NoLCS
08FWAIA023SB	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	3-pointICAL
08FWAIA023SB	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWAIA023SB	TO-15	P-CYMENE	4.3	UG/M3	UJ	NoLCS
08FWAIA023SB	TO-15	P-CYMENE	4.3	UG/M3	UJ	3-pointICAL
08FWAIA023SB	TO-15-SIM	TETRACHLOROETHENE	0.095	UG/M3	J	LB<RL
08FWAIA023SB	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.63	UG/M3	U	LB<RL
08FWAIA023SB	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWAIA025S	TO-15	1,1,1,2-TETRACHLOROETHANE	5	UG/M3	UJ	3-pointICAL
08FWAIA025S	TO-15	1,1,1,2-TETRACHLOROETHANE	5	UG/M3	UJ	NoLCS
08FWAIA025S	TO-15	1,2,3-TRICHLOROPROPANE	4.4	UG/M3	UJ	NoLCS
08FWAIA025S	TO-15	1,2,3-TRICHLOROPROPANE	4.4	UG/M3	UJ	3-pointICAL
08FWAIA025S	TO-15	1,2,4-TRICHLOROBENZENE	5.4	UG/M3	U	LB<RL
08FWAIA025S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7	UG/M3	UJ	CCV<LCL
08FWAIA025S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7	UG/M3	UJ	3-pointICAL
08FWAIA025S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7	UG/M3	UJ	NoLCS
08FWAIA025S	TO-15	1,2-DICHLOROBENZENE	0.88	UG/M3	U	LB<RL
08FWAIA025S	TO-15	1,3-DICHLOROBENZENE	0.88	UG/M3	U	LB<RL
08FWAIA025S	TO-15	BROMOBENZENE	4.7	UG/M3	UJ	3-pointICAL
08FWAIA025S	TO-15	BROMOBENZENE	4.7	UG/M3	UJ	NoLCS
08FWAIA025S	TO-15	NAPHTHALENE	3.8	UG/M3	U	LB<RL
08FWAIA025S	TO-15	P-CYMENE	4	UG/M3	UJ	3-pointICAL
08FWAIA025S	TO-15	P-CYMENE	4	UG/M3	UJ	NoLCS
08FWAIA025S	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.2	UG/M3	U	LB<RL
08FWAIA025S	TO-15-SIM	TETRACHLOROETHENE	0.15	UG/M3	J	LB<RL
08FWAIA025S	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.58	UG/M3	U	LB<RL
08FWAIA025S	TO-15-SIM	TRICHLOROETHENE	0.16	UG/M3	U	LB<RL
08FWAIA034S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	3-pointICAL
08FWAIA034S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	NoLCS
08FWAIA034S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	NoLCS
08FWAIA034S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	3-pointICAL
08FWAIA034S	TO-15	1,2,4-TRICHLOROBENZENE	5	UG/M3	U	LB<RL
08FWAIA034S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	3-pointICAL
08FWAIA034S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	NoLCS
08FWAIA034S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	CCV<LCL
08FWAIA034S	TO-15	1,2-DICHLOROBENZENE	0.8	UG/M3	U	LB<RL
08FWAIA034S	TO-15	1,3-DICHLOROBENZENE	0.8	UG/M3	U	LB<RL
08FWAIA034S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	3-pointICAL
08FWAIA034S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	NoLCS
08FWAIA034S	TO-15	NAPHTHALENE	3.5	UG/M3	U	LB<RL
08FWAIA034S	TO-15	P-CYMENE	3.7	UG/M3	UJ	NoLCS
08FWAIA034S	TO-15	P-CYMENE	3.7	UG/M3	UJ	3-pointICAL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWAIA034S	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.18	UG/M3	U	LB<RL
08FWAIA034S	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.53	UG/M3	U	LB<RL
08FWAIA034S	TO-15-SIM	TRICHLOROETHENE	0.14	UG/M3	U	LB<RL
08FWAIA049S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	NoLCS
08FWAIA049S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	3-pointICAL
08FWAIA049S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	NoLCS
08FWAIA049S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	3-pointICAL
08FWAIA049S	TO-15	1,2,4-TRICHLOROBENZENE	5.9	UG/M3	U	LB<RL
08FWAIA049S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	CCV<LCL
08FWAIA049S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	NoLCS
08FWAIA049S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	3-pointICAL
08FWAIA049S	TO-15	1,2-DICHLOROBENZENE	0.95	UG/M3	U	LB<RL
08FWAIA049S	TO-15	1,3-DICHLOROBENZENE	0.95	UG/M3	U	LB<RL
08FWAIA049S	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	3-pointICAL
08FWAIA049S	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	NoLCS
08FWAIA049S	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWAIA049S	TO-15	P-CYMENE	4.3	UG/M3	UJ	3-pointICAL
08FWAIA049S	TO-15	P-CYMENE	4.3	UG/M3	UJ	NoLCS
08FWAIA049S	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.22	UG/M3	U	LB<RL
08FWAIA049S	TO-15-SIM	TETRACHLOROETHENE	0.098	UG/M3	J	LB<RL
08FWAIA049S	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.63	UG/M3	U	LB<RL
08FWAIA049S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWASG023S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	3-pointICAL
08FWASG023S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	NoLCS
08FWASG023S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	NoLCS
08FWASG023S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	3-pointICAL
08FWASG023S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	3-pointICAL
08FWASG023S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	NoLCS
08FWASG023S	TO-15	2-BUTANONE	3.2	UG/M3	J	FD>RPD
08FWASG023S	TO-15	ACETONE	6.1	UG/M3	U	LB<RL
08FWASG023S	TO-15	ACETONE	6.1	UG/M3	U	FD>RPD
08FWASG023S	TO-15	BROMOBENZENE	5	UG/M3	UJ	3-pointICAL
08FWASG023S	TO-15	BROMOBENZENE	5	UG/M3	UJ	NoLCS
08FWASG023S	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWASG023S	TO-15	P-CYMENE	4.2	UG/M3	UJ	3-pointICAL
08FWASG023S	TO-15	P-CYMENE	4.2	UG/M3	UJ	NoLCS
08FWASG023S	TO-15-SIM	BENZENE	0.25	UG/M3	U	LB<RL
08FWASG023S	TO-15-SIM	CHLOROFORM	2.3	UG/M3	J	FD>RPD
08FWASG023S	TO-15-SIM	M,P-XYLENE	0.21	UG/M3	J	LB<RL
08FWASG023S	TO-15-SIM	O-XYLENE	0.13	UG/M3	U	LB<RL
08FWASG023S	TO-15-SIM	TETRACHLOROETHENE	36	UG/M3	J	LB<RL
08FWASG023S	TO-15-SIM	TETRACHLOROETHENE	36	UG/M3	J	FD>RPD
08FWASG023SB	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	NoLCS
08FWASG023SB	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	3-pointICAL
08FWASG023SB	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	NoLCS
08FWASG023SB	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	3-pointICAL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWASG023SB	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	NoLCS
08FWASG023SB	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	3-pointICAL
08FWASG023SB	TO-15	2-BUTANONE	6.2	UG/M3	J	FD>RPD
08FWASG023SB	TO-15	ACETONE	22	UG/M3	J	FD>RPD
08FWASG023SB	TO-15	ACETONE	22	UG/M3	J	LB<RL
08FWASG023SB	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	NoLCS
08FWASG023SB	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	3-pointICAL
08FWASG023SB	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWASG023SB	TO-15	P-CYMENE	4.3	UG/M3	UJ	NoLCS
08FWASG023SB	TO-15	P-CYMENE	4.3	UG/M3	UJ	3-pointICAL
08FWASG023SB	TO-15-SIM	BENZENE	0.25	UG/M3	U	LB<RL
08FWASG023SB	TO-15-SIM	CHLOROFORM	1.5	UG/M3	J	FD>RPD
08FWASG023SB	TO-15-SIM	TETRACHLOROETHENE	0.44	UG/M3	J	LB<RL
08FWASG023SB	TO-15-SIM	TETRACHLOROETHENE	0.44	UG/M3	J	FD>RPD
08FWASG023SB	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWASG025S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.8	UG/M3	UJ	NoLCS
08FWASG025S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.8	UG/M3	UJ	3-pointICAL
08FWASG025S	TO-15	1,2,3-TRICHLOROPROPANE	4.2	UG/M3	UJ	NoLCS
08FWASG025S	TO-15	1,2,3-TRICHLOROPROPANE	4.2	UG/M3	UJ	3-pointICAL
08FWASG025S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.8	UG/M3	UJ	NoLCS
08FWASG025S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.8	UG/M3	UJ	3-pointICAL
08FWASG025S	TO-15	ACETONE	4.9	UG/M3	U	LB<RL
08FWASG025S	TO-15	BROMOBENZENE	4.5	UG/M3	UJ	NoLCS
08FWASG025S	TO-15	BROMOBENZENE	4.5	UG/M3	UJ	3-pointICAL
08FWASG025S	TO-15	NAPHTHALENE	3.7	UG/M3	U	LB<RL
08FWASG025S	TO-15	P-CYMENE	3.9	UG/M3	UJ	NoLCS
08FWASG025S	TO-15	P-CYMENE	3.9	UG/M3	UJ	3-pointICAL
08FWASG025S	TO-15-SIM	BENZENE	0.22	UG/M3	U	LB<RL
08FWASG025S	TO-15-SIM	M,P-XYLENE	0.17	UG/M3	J	LB<RL
08FWASG025S	TO-15-SIM	O-XYLENE	0.12	UG/M3	U	LB<RL
08FWASG025S	TO-15-SIM	TOLUENE	0.12	UG/M3	U	LB<RL
08FWASG025S	TO-15-SIM	TRICHLOROETHENE	0.15	UG/M3	U	LB<RL
08FWASG034S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.7	UG/M3	UJ	3-pointICAL
08FWASG034S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.7	UG/M3	UJ	NoLCS
08FWASG034S	TO-15	1,2,3-TRICHLOROPROPANE	4.1	UG/M3	UJ	3-pointICAL
08FWASG034S	TO-15	1,2,3-TRICHLOROPROPANE	4.1	UG/M3	UJ	NoLCS
08FWASG034S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.6	UG/M3	UJ	3-pointICAL
08FWASG034S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.6	UG/M3	UJ	NoLCS
08FWASG034S	TO-15	ACETONE	4.1	UG/M3	U	LB<RL
08FWASG034S	TO-15	BROMOBENZENE	4.4	UG/M3	UJ	NoLCS
08FWASG034S	TO-15	BROMOBENZENE	4.4	UG/M3	UJ	3-pointICAL
08FWASG034S	TO-15	NAPHTHALENE	3.6	UG/M3	U	LB<RL
08FWASG034S	TO-15	P-CYMENE	3.7	UG/M3	UJ	3-pointICAL
08FWASG034S	TO-15	P-CYMENE	3.7	UG/M3	UJ	NoLCS
08FWASG034S	TO-15-SIM	BENZENE	0.22	UG/M3	U	LB<RL
08FWASG034S	TO-15-SIM	M,P-XYLENE	0.13	UG/M3	J	LB<RL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWASG034S	TO-15-SIM	O-XYLENE	0.12	UG/M3	U	LB<RL
08FWASG034S	TO-15-SIM	TOLUENE	0.1	UG/M3	U	LB<RL
08FWASG034S	TO-15-SIM	TRICHLOROETHENE	0.15	UG/M3	U	LB<RL
08FWASG049S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	3-pointICAL
08FWASG049S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	NoLCS
08FWASG049S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	NoLCS
08FWASG049S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	3-pointICAL
08FWASG049S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	NoLCS
08FWASG049S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	3-pointICAL
08FWASG049S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	NoLCS
08FWASG049S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	3-pointICAL
08FWASG049S	TO-15	NAPHTHALENE	3.5	UG/M3	U	LB<RL
08FWASG049S	TO-15	P-CYMENE	3.7	UG/M3	UJ	NoLCS
08FWASG049S	TO-15	P-CYMENE	3.7	UG/M3	UJ	3-pointICAL
08FWASG049S	TO-15-SIM	TRICHLOROETHENE	0.14	UG/M3	U	LB<RL
08FWBIA007S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.5	UG/M3	UJ	NoLCS
08FWBIA007S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.5	UG/M3	UJ	3-pointICAL
08FWBIA007S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	NoLCS
08FWBIA007S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	3-pointICAL
08FWBIA007S	TO-15	1,2,4-TRICHLOROBENZENE	4.9	UG/M3	U	LB<RL
08FWBIA007S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.4	UG/M3	UJ	CCV<LCL
08FWBIA007S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.4	UG/M3	UJ	3-pointICAL
08FWBIA007S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.4	UG/M3	UJ	NoLCS
08FWBIA007S	TO-15	1,2-DICHLOROBENZENE	0.79	UG/M3	U	LB<RL
08FWBIA007S	TO-15	1,3-DICHLOROBENZENE	0.79	UG/M3	U	LB<RL
08FWBIA007S	TO-15	BROMOBENZENE	4.2	UG/M3	UJ	3-pointICAL
08FWBIA007S	TO-15	BROMOBENZENE	4.2	UG/M3	UJ	NoLCS
08FWBIA007S	TO-15	NAPHTHALENE	3.4	UG/M3	U	LB<RL
08FWBIA007S	TO-15	P-CYMENE	3.6	UG/M3	UJ	NoLCS
08FWBIA007S	TO-15	P-CYMENE	3.6	UG/M3	UJ	3-pointICAL
08FWBIA007S	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.18	UG/M3	U	LB<RL
08FWBIA007S	TO-15-SIM	TETRACHLOROETHENE	0.079	UG/M3	J	LB<RL
08FWBIA007S	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.52	UG/M3	U	LB<RL
08FWBIA007S	TO-15-SIM	TRICHLOROETHENE	0.14	UG/M3	U	LB<RL
08FWBIA014S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	3-pointICAL
08FWBIA014S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.4	UG/M3	UJ	NoLCS
08FWBIA014S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	3-pointICAL
08FWBIA014S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	NoLCS
08FWBIA014S	TO-15	1,2,4-TRICHLOROBENZENE	5.9	UG/M3	U	LB<RL
08FWBIA014S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	3-pointICAL
08FWBIA014S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	CCV<LCL
08FWBIA014S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.6	UG/M3	UJ	NoLCS
08FWBIA014S	TO-15	1,2-DICHLOROBENZENE	0.95	UG/M3	U	LB<RL
08FWBIA014S	TO-15	1,3-DICHLOROBENZENE	0.95	UG/M3	U	LB<RL
08FWBIA014S	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	3-pointICAL
08FWBIA014S	TO-15	BROMOBENZENE	5.1	UG/M3	UJ	NoLCS

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWBIA014S	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWBIA014S	TO-15	P-CYMENE	4.3	UG/M3	UJ	3-pointICAL
08FWBIA014S	TO-15	P-CYMENE	4.3	UG/M3	UJ	NoLCS
08FWBIA014S	TO-15-SIM	1,1,2,2-TETRACHLOROETHANE	0.22	UG/M3	U	LB<RL
08FWBIA014S	TO-15-SIM	TRANS-1,2-DICHLOROETHENE	0.63	UG/M3	U	LB<RL
08FWBIA014S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWBSG007S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	3-pointICAL
08FWBSG007S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	NoLCS
08FWBSG007S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	NoLCS
08FWBSG007S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	3-pointICAL
08FWBSG007S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	NoLCS
08FWBSG007S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	3-pointICAL
08FWBSG007S	TO-15	ACETONE	6.1	UG/M3	U	LB<RL
08FWBSG007S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	3-pointICAL
08FWBSG007S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	NoLCS
08FWBSG007S	TO-15	NAPHTHALENE	3.5	UG/M3	U	LB<RL
08FWBSG007S	TO-15	P-CYMENE	3.7	UG/M3	UJ	NoLCS
08FWBSG007S	TO-15	P-CYMENE	3.7	UG/M3	UJ	3-pointICAL
08FWBSG007S	TO-15-SIM	BENZENE	0.21	UG/M3	U	LB<RL
08FWBSG007S	TO-15-SIM	M,P-XYLENE	0.18	UG/M3	J	LB<RL
08FWBSG007S	TO-15-SIM	O-XYLENE	0.12	UG/M3	U	LB<RL
08FWBSG014S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.5	UG/M3	UJ	NoLCS
08FWBSG014S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.5	UG/M3	UJ	3-pointICAL
08FWBSG014S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	NoLCS
08FWBSG014S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	3-pointICAL
08FWBSG014S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.8	UG/M3	UJ	3-pointICAL
08FWBSG014S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.8	UG/M3	UJ	NoLCS
08FWBSG014S	TO-15	ACETONE	5.2	UG/M3	U	LB<RL
08FWBSG014S	TO-15	BROMOBENZENE	5.2	UG/M3	UJ	3-pointICAL
08FWBSG014S	TO-15	BROMOBENZENE	5.2	UG/M3	UJ	NoLCS
08FWBSG014S	TO-15	NAPHTHALENE	4.2	UG/M3	U	LB<RL
08FWBSG014S	TO-15	P-CYMENE	4.4	UG/M3	UJ	3-pointICAL
08FWBSG014S	TO-15	P-CYMENE	4.4	UG/M3	UJ	NoLCS
08FWBSG014S	TO-15-SIM	BENZENE	0.26	UG/M3	U	LB<RL
08FWBSG014S	TO-15-SIM	O-XYLENE	0.14	UG/M3	U	LB<RL
08FWBSG014S	TO-15-SIM	TOLUENE	0.2	UG/M3	U	LB<RL
08FWBSG014S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWCIA002S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	3-pointICAL
08FWCIA002S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	NoLCS
08FWCIA002S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	3-pointICAL
08FWCIA002S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	NoLCS
08FWCIA002S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	NoLCS
08FWCIA002S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	3-pointICAL
08FWCIA002S	TO-15	BROMOBENZENE	5	UG/M3	UJ	NoLCS
08FWCIA002S	TO-15	BROMOBENZENE	5	UG/M3	UJ	3-pointICAL
08FWCIA002S	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWCIA002S	TO-15	P-CYMENE	4.2	UG/M3	UJ	NoLCS
08FWCIA002S	TO-15	P-CYMENE	4.2	UG/M3	UJ	3-pointICAL
08FWCIA002S	TO-15-SIM	TETRACHLOROETHENE	0.078	UG/M3	J	LB<RL
08FWCIA002S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWCSG002S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.2	UG/M3	UJ	NoLCS
08FWCSG002S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.2	UG/M3	UJ	3-pointICAL
08FWCSG002S	TO-15	1,2,3-TRICHLOROPROPANE	170	UG/M3	J	3-pointICAL
08FWCSG002S	TO-15	1,2,3-TRICHLOROPROPANE	170	UG/M3	J	NoLCS
08FWCSG002S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.3	UG/M3	UJ	3-pointICAL
08FWCSG002S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.3	UG/M3	UJ	NoLCS
08FWCSG002S	TO-15	BROMOBENZENE	4.9	UG/M3	UJ	3-pointICAL
08FWCSG002S	TO-15	BROMOBENZENE	4.9	UG/M3	UJ	NoLCS
08FWCSG002S	TO-15	NAPHTHALENE	4	UG/M3	U	LB<RL
08FWCSG002S	TO-15	P-CYMENE	4.2	UG/M3	UJ	3-pointICAL
08FWCSG002S	TO-15	P-CYMENE	4.2	UG/M3	UJ	NoLCS
08FWCSG002S	TO-15-SIM	BENZENE	0.35	UG/M3	U	LB<RL
08FWDIA063S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.5	UG/M3	UJ	NoLCS
08FWDIA063S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.5	UG/M3	UJ	3-pointICAL
08FWDIA063S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	3-pointICAL
08FWDIA063S	TO-15	1,2,3-TRICHLOROPROPANE	4.8	UG/M3	UJ	NoLCS
08FWDIA063S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.8	UG/M3	UJ	NoLCS
08FWDIA063S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.8	UG/M3	UJ	3-pointICAL
08FWDIA063S	TO-15	BROMOBENZENE	5.2	UG/M3	UJ	3-pointICAL
08FWDIA063S	TO-15	BROMOBENZENE	5.2	UG/M3	UJ	NoLCS
08FWDIA063S	TO-15	NAPHTHALENE	1.2	UG/M3	J	LB<RL
08FWDIA063S	TO-15	P-CYMENE	5.8	UG/M3	J	3-pointICAL
08FWDIA063S	TO-15	P-CYMENE	5.8	UG/M3	J	NoLCS
08FWDIA063S	TO-15-SIM	BENZENE	0.59	UG/M3	U	LB<RL
08FWDIA063S	TO-15-SIM	TETRACHLOROETHENE	0.098	UG/M3	J	LB<RL
08FWDIA063S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL
08FWDSG063S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	NoLCS
08FWDSG063S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.6	UG/M3	UJ	3-pointICAL
08FWDSG063S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	NoLCS
08FWDSG063S	TO-15	1,2,3-TRICHLOROPROPANE	4	UG/M3	UJ	3-pointICAL
08FWDSG063S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	NoLCS
08FWDSG063S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.5	UG/M3	UJ	3-pointICAL
08FWDSG063S	TO-15	ACETONE	4.4	UG/M3	U	LB<RL
08FWDSG063S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	NoLCS
08FWDSG063S	TO-15	BROMOBENZENE	4.3	UG/M3	UJ	3-pointICAL
08FWDSG063S	TO-15	FREON 11	4.6	UG/M3	J	IC%RSD
08FWDSG063S	TO-15	NAPHTHALENE	1.5	UG/M3	J	LB<RL
08FWDSG063S	TO-15	P-CYMENE	3.7	UG/M3	UJ	3-pointICAL
08FWDSG063S	TO-15	P-CYMENE	3.7	UG/M3	UJ	NoLCS
08FWDSG063S	TO-15-SIM	BENZENE	0.42	UG/M3	U	LB<RL
08FWDSG063S	TO-15-SIM	O-XYLENE	0.12	UG/M3	U	LB<RL
08FWDSG063S	TO-15-SIM	TETRACHLOROETHENE	0.11	UG/M3	J	LB<RL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWDSG063S	TO-15-SIM	TRICHLOROETHENE	0.14	UG/M3	U	LB<RL
08FWEIA040S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.1	UG/M3	UJ	NoLCS
08FWEIA040S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.1	UG/M3	UJ	3-pointICAL
08FWEIA040S	TO-15	1,2,3-TRICHLOROPROPANE	4.5	UG/M3	UJ	NoLCS
08FWEIA040S	TO-15	1,2,3-TRICHLOROPROPANE	4.5	UG/M3	UJ	3-pointICAL
08FWEIA040S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.2	UG/M3	UJ	3-pointICAL
08FWEIA040S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.2	UG/M3	UJ	NoLCS
08FWEIA040S	TO-15	BROMOBENZENE	4.8	UG/M3	UJ	3-pointICAL
08FWEIA040S	TO-15	BROMOBENZENE	4.8	UG/M3	UJ	NoLCS
08FWEIA040S	TO-15	NAPHTHALENE	3.9	UG/M3	U	LB<RL
08FWEIA040S	TO-15	P-CYMENE	4.1	UG/M3	UJ	3-pointICAL
08FWEIA040S	TO-15	P-CYMENE	4.1	UG/M3	UJ	NoLCS
08FWEIA040S	TO-15-SIM	TETRACHLOROETHENE	0.084	UG/M3	J	LB<RL
08FWEIA040S	TO-15-SIM	TRICHLOROETHENE	0.16	UG/M3	U	LB<RL
08FWESG040S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.8	UG/M3	UJ	NoLCS
08FWESG040S	TO-15	1,1,1,2-TETRACHLOROETHANE	4.8	UG/M3	UJ	3-pointICAL
08FWESG040S	TO-15	1,2,3-TRICHLOROPROPANE	4.2	UG/M3	UJ	NoLCS
08FWESG040S	TO-15	1,2,3-TRICHLOROPROPANE	4.2	UG/M3	UJ	3-pointICAL
08FWESG040S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.8	UG/M3	UJ	NoLCS
08FWESG040S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	6.8	UG/M3	UJ	3-pointICAL
08FWESG040S	TO-15	ACETONE	4.7	UG/M3	U	LB<RL
08FWESG040S	TO-15	BROMOBENZENE	4.5	UG/M3	UJ	3-pointICAL
08FWESG040S	TO-15	BROMOBENZENE	4.5	UG/M3	UJ	NoLCS
08FWESG040S	TO-15	FREON 11	4	UG/M3	J	IC%RSD
08FWESG040S	TO-15	NAPHTHALENE	3.7	UG/M3	U	LB<RL
08FWESG040S	TO-15	P-CYMENE	3.9	UG/M3	UJ	3-pointICAL
08FWESG040S	TO-15	P-CYMENE	3.9	UG/M3	UJ	NoLCS
08FWESG040S	TO-15-SIM	BENZENE	0.22	UG/M3	U	LB<RL
08FWESG040S	TO-15-SIM	M,P-XYLENE	0.11	UG/M3	J	LB<RL
08FWESG040S	TO-15-SIM	O-XYLENE	0.12	UG/M3	U	LB<RL
08FWESG040S	TO-15-SIM	TOLUENE	0.11	UG/M3	U	LB<RL
08FWESG040S	TO-15-SIM	TRICHLOROETHENE	0.11	UG/M3	J	LB<RL
08FWFIA042S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	3-pointICAL
08FWFIA042S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	NoLCS
08FWFIA042S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	3-pointICAL
08FWFIA042S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	NoLCS
08FWFIA042S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	3-pointICAL
08FWFIA042S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	NoLCS
08FWFIA042S	TO-15	BROMOBENZENE	5	UG/M3	UJ	NoLCS
08FWFIA042S	TO-15	BROMOBENZENE	5	UG/M3	UJ	3-pointICAL
08FWFIA042S	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWFIA042S	TO-15	P-CYMENE	4.2	UG/M3	UJ	NoLCS
08FWFIA042S	TO-15	P-CYMENE	4.2	UG/M3	UJ	3-pointICAL
08FWFIA042S	TO-15-SIM	BENZENE	0.57	UG/M3	U	LB<RL
08FWFIA042S	TO-15-SIM	TETRACHLOROETHENE	0.092	UG/M3	J	LB<RL
08FWFIA042S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL

Field ID	Method	Analyte	Final Result	Units	Final Flag	Reason
08FWFSG042S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	NoLCS
08FWFSG042S	TO-15	1,1,1,2-TETRACHLOROETHANE	5.3	UG/M3	UJ	3-pointICAL
08FWFSG042S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	NoLCS
08FWFSG042S	TO-15	1,2,3-TRICHLOROPROPANE	4.7	UG/M3	UJ	3-pointICAL
08FWFSG042S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	3-pointICAL
08FWFSG042S	TO-15	1,2-DIBROMO-3-CHLOROPROPANE	7.5	UG/M3	UJ	NoLCS
08FWFSG042S	TO-15	BROMOBENZENE	5	UG/M3	UJ	3-pointICAL
08FWFSG042S	TO-15	BROMOBENZENE	5	UG/M3	UJ	NoLCS
08FWFSG042S	TO-15	FREON 11	4.8	UG/M3	J	IC%RSD
08FWFSG042S	TO-15	NAPHTHALENE	4.1	UG/M3	U	LB<RL
08FWFSG042S	TO-15	P-CYMENE	4.2	UG/M3	UJ	3-pointICAL
08FWFSG042S	TO-15	P-CYMENE	4.2	UG/M3	UJ	NoLCS
08FWFSG042S	TO-15-SIM	TRICHLOROETHENE	0.17	UG/M3	U	LB<RL

3-pointICAL = A 3-point initial calibration was performed instead of the required 5-point initial calibration
CCV<LCL = Continuing calibration recovery less than lower control limit
FD>RPD = Field duplicate exceeds relative percent difference criteria
IC%RSD = Initial calibration relative standard deviation exceeded
LB<RL = Laboratory blank concentration less than the reporting limit
NoLCS = Laboratory control sample not spiked for this analyte