

Vertical Distribution of VOCs in Soils from Groundwater to the Surface/Subslab

Vertical Distribution of VOCs In Soils from Groundwater To the Surface/Subslab

EPA Contract No. EP-C-05-061

Task Order No.65

Prepared for

Tetra Tech EM Inc. 1230 Columbia Street Suite 1000 San Diego, CA 92101

Prepared for

Dr. Brian A. Schumacher, Task Order Project Officer U.S. Environmental Protection Agency Office of Research and Development National Exposure Research Laboratory Las Vegas, NV 89119

Although this work was reviewed by EPA and approved for publication, it may not necessarily reflect official Agency policy. Mention of trade names and commercial products does not constitute endorsement or recommendation for use.

FOREWORD

The U.S. Environmental Protection Agency (EPA) is charged by Congress with protecting the nation's natural resources. Under the mandate of national environmental laws, the EPA strives to formulate and implement actions leading to a compatible balance between human activities and the ability of natural systems to support and nurture life. To meet this mandate, the EPA's Office of Research and Development (ORD) provides data and scientific support that can be used to solve environmental problems, build the scientific knowledge base needed to manage ecological resources wisely, understand how pollutants affect public health, and prevent or reduce environmental risks.

The National Exposure Research Laboratory (NERL) is the Agency's center for investigation of technical and management approaches for identifying and quantifying exposures to human health and the environment. Goals of the laboratory's research program are to (1) develop and evaluate methods and technologies for characterizing and monitoring air, soil, and water; (2) support regulatory and policy decisions; and (3) provide the scientific support needed to ensure effective implementation of environmental regulations and strategies.

This report presents the activities, results, findings, and recommendations of sampling conducted from January through February, 2008 at Naval Air Station (NAS) Lemoore, Installation Restoration Program (IRP) Site 14 to investigate the vertical distribution of volatile organic compounds (VOCs) in soil gas from groundwater to the surface and subslab environments. This report was co-authored by Mr. James Elliot and Dr. Greg Swanson of Tetra Tech. The authors acknowledge the contribution of Dr. Brian Schumacher and Mr. John Zimmerman, the EPA task order project officer and co-project officer, in conducting key parts of the field work, providing guidance throughout the project, and providing insightful comments on the draft report. The author also acknowledge the tremendous support of Mr. Frank Nielson of the NAS Lemoore environmental staff, who facilitated access to IRP Site 14 to conduct the testing and provided logistical support and ongoing assistance with operations during the field sampling activities.

EXECUTIVE SUMMARY

Tetra Tech EM, Inc. (Tetra Tech EMI) was contracted by the U.S. Environmental Protection Agency (EPA) to assess the vertical and horizontal distribution of volatile organic compounds in the subsurface, from groundwater to the surface/subslab environment, and to develop a database of paired macro-purge and micro-purge soil gas sample measurements. In addition, sampling was conducted to evaluate the performance of a variety of soil gas probe construction materials (tubing types) and to test passive diffusion samplers (PDSs).

The field study was conducted at Installation Restoration Program (IRP) Site 14 on Naval Air Station (NAS) Lemoore, California. IRP Site 14 is located in the operations area of NAS Lemoore and consists of maintenance buildings, hangars, and aircraft parking areas. Chlorinated volatile organic compounds (VOCs) are the primary contaminants that have been found in soil, soil gas, and groundwater at IRP Site 14 near the Building 180 hangar, the adjacent aircraft parking area, and near Buildings 170 where this investigation was conducted. The plume of chlorinated VOCs at IRP Site 14 is composed primarily of trichloroethene (TCE) and 1,1-dichloroethene (DCE), with minor amounts of 1,2-DCE, 1,1-dichloroethane (DCA), 1,2-DCA, and tetrachloroethene (PCE). Fuel residuals are also commingled with the chlorinated solvents. Two discernable VOC plumes are present at IRP Site 14: one emanating from the Building 180 area, and one located south of Building 170.

Two transects of six macro-purge (standard 1/8 inch tubing size) sampling locations were established at the site. The locations are in two lines (transects) oriented approximately east-west, with a southern (primary) transect and a northern (secondary) transect. In each transect, the two western-most locations are located on an approximately 6-inch thick concrete pad, and the remaining four locations in each transect are east of the slab, in an unpaved area. At each location, soil vapor probes were installed at 2, 4, 7, and 10 feet below ground surface (bgs). At the four locations on the concrete slab, subslab soil gas probes were installed immediately beneath the concrete. Collocated micro-purge (0.01 inch tubing size) sampling locations were installed along the southern (primary) transect. PDS wells were installed at depths of 2, 4, 7, and 10 feet bgs at four locations in the southern transect and at two locations adjacent to a former jet engine test cell. At two locations in the southern transect, clusters of macro-purge probes constructed with different tubing types (stainless steel, copper, polyetheretherketone [PEEK], Teflon, Nylaflow, and polyethylene) were installed at approximately 6 feet bgs.

The sampling probes were installed in pilot holes advanced to groundwater at depths between 10.7 and 11.5 feet bgs. Grab groundwater samples were collected at seven of the locations. Soil samples were collected from the pilot holes at the probe installation depths (i.e., 2, 4, 7, and 10 feet bgs) at each of the locations. Soils encountered in the pilot holes consisted primarily of silty sands, clayey sands, and clays.

Each macro-purge and micro-purge probe was sampled at least twice over the course of one week and analyzed on-site in a mobile laboratory. Collocated micro-purge and macro-purge probes were sampled concurrently. PDSs were inserted in the PDS wells and allowed to equilibrate for a minimum of 30 days before being retrieved and submitted for off-site analysis.

Statistical analyses of the paired micro-purge and macro-purge soil gas samples indicate there is a correlation between the results obtained from the two sampling methodologies; however, the range of relative percent differences (RPDs) for the macro-purge samples was 50 percent, which is largely within analytical error, whereas the range of RPDs for the micro-purge samples was 260 percent, suggesting there are some as yet undetermined issues with this sampling method that are limiting its reproducibility.

The results of analysis of samples obtained from collocated probes constructed with different tubing types indicate that for most materials, the observed variability in measured concentrations is within analytical

error. Polyethylene tubing consistently yielded VOC concentrations than the other tubing types except for copper. Copper tubing VOC concentrations were significantly lower than the other tubing types and their concentrations were inconsistent with one sample being a non-detect and the other having $170 \, \mu g/m^3$ of TCE.

After converting the PDS sample results to gas equivalent concentrations using Henry's Law, it was observed that the TCE and PCE concentration results for the PDSs were generally higher than in the collocated macro-purge probes. Additional data is needed to more completely assess the performance of these samplers.

The results of the investigation into the distribution of soil gas VOCs near a slab indicate that, as expected, VOC concentrations in soil gas decrease with increasing vertical separation from the groundwater source and with increasing horizontal distance away from the edge of the slab. These findings are consistent with physical principles of subsurface vapor distribution from a groundwater source and the impact of a slab as a physical barrier. However, the decline in soil gas VOC concentrations moving horizontally away from the edge of the slab was more rapid than expected. Limited groundwater data show a corresponding large decrease in VOC concentrations moving away from the slab. These observations indicate that the presence of the slab may have a significant and abrupt impact on VOC concentrations in soil gas and the upper-most groundwater, and have important implications for sample location selection in vapor intrusion studies.

CONTENTS

Section		<u>Pag</u>	<u>ge</u>
FOREW	ORD		i
EXECU'	TIVE S	UMMARY	ii
LIST OF	FACRO	NYMS AND ABBREVIATIONS	vi
1.0	INTRO	DUCTION1-	-1
2.0	SITE BA	ACKGROUND AND PROBE LAYOUT2-	-1
2	2	RP SITE 14 SETTING AND BACKGROUND	-1 -1 -3 -6
Ź	2.2 S 2	.1.3 Selection of IRP Site 14	-6 -6
2		EXPERIMENTAL DESIGN	
3.0	SAMPL	ING AND ANALYSIS	-1
	3.2 N 3	AMPLE COLLECTION	-1 -1 -2
•	3.3 Q 3 3	QUALITY ASSURANCE/QUALITY CONTROL33.1 Field Quality Control Protocols33.2 Mobile Laboratory Quality Control Protocols3-3.3.2.1 Laboratory Data Logs3-3.3.2.2 Instrument Calibration3-3.3.2.3 Blanks33.3 Project QAPP Deviations and Additions33.4 QC Sample Results3-	-2 -2 -3 -3 -4 -5
4.0	RESUL	TS AND DISCUSSION4-	-1
	4 4 4 4	DATA SUMMARY	-1 -1 -1 -6 -6

CONTENTS (Continued)

4.2 DISCUSSION 4.1.1 Distribution of VOCs in the Subsurface 4.1.1 4.2.2 Macro-Purge versus Micro-Purge Sampling 4.1.1 4.2.3 Evaluation of Tubing Types 4.1.1 4.2.4 Passive Diffusion Samples 4.1.1 5.0 CONCLUSIONS 5-1 6.0 RECOMMENDATIONS 6-1 7.0 REFERENCES 7-1 APPENDICES	Sec	<u>tion</u>		Page
4.2.3 Evaluation of Tubing Types		4.2		
4-19 5.0 CONCLUSIONS 5-1 6.0 RECOMMENDATIONS 6-1 7.0 REFERENCES 7-1 7-1 APPENDICES A Sampling Trip Report B Passive Diffusion Sampler SOP C Laboratory Data Package Figures 2-1 Detailed Site Map 2-2 2-2 Groundwater Contours - A Zone Aquifer, January 2007 2-4 2-3 Trichloroethene Plume in the A Zone Aquifer, January 2007 2-7 2-4 Soil Gas Probe Transects 2-9 2-5 Nested Soil Gas Probe Construction Schematic 2-14 4-1 Schematic Isoconcentration Contours, South Transect, Macro-Purge Data 4-8 4-2 Schematic Isoconcentration Contours, South Transect, Micro-Purge Data 4-8 4-3 Plot of Macro-Purge versus Micro-Purge Results 4-17 4-4 Comparison of Soil Gas Collection Methods 4-17 4-5 Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods 4-18 Tables Tables 7-18 Typical Characteristics of the A Clay 2-5 2-3 Macro-Purge Soil Gas Probe Installation Details 2-10 4-10 4-10 4-10			4.2.2 Macro-Purge versus Micro-Purge Sampling	4-14
5.0 CONCLUSIONS 5-1				
6.0 RECOMMENDATIONS 6-1 7.0 REFERENCES 7-1 APPENDICES A Sampling Trip Report B B Passive Diffusion Sampler SOP B C Laboratory Data Package Figures 2-1 Detailed Site Map 2-2 2-2 Groundwater Contours – A Zone Aquifer, January 2007 2-4 2-3 Trichloroethene Plume in the A Zone Aquifer, January 2007 2-7 2-4 Soil Gas Probe Transects 2-9 2-5 Nested Soil Gas Probe Construction Schematic 2-14 4-1 Schematic Isoconcentration Contours, South Transect, Macro-Purge Data 4-5 4-2 Schematic Isoconcentration Contours, South Transect, Micro-Purge Data 4-8 4-1 Comparison of Soil Gas Collection Methods 4-17 4-3 Plot of Macro-Purge versus Micro-Purge Results 4-17 4-5 Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods 4-18 Tables 2-1 Typical Characteristics of the A Clay 2-			4.2.4 Passive Diffusion Samples	4-19
A Sampling Trip Report B Passive Diffusion Sampler SOP C Laboratory Data Package Figures 2-1 Detailed Site Map	5.0	CON	ICLUSIONS	5-1
A Sampling Trip Report B Passive Diffusion Sampler SOP C Laboratory Data Package Figures 2-1 Detailed Site Map	6.0	REC	OMMENDATIONS	6-1
A Sampling Trip Report B Passive Diffusion Sampler SOP C Laboratory Data Package Figures 2-1 Detailed Site Map	7.0	REF	ERENCES	7-1
B Passive Diffusion Sampler SOP C Laboratory Data Package Figures 2-1 Detailed Site Map	AP	PENDIC	ES	
2-1 Detailed Site Map 2-2 2-2 Groundwater Contours – A Zone Aquifer, January 2007 2-4 2-3 Trichloroethene Plume in the A Zone Aquifer, January 2007 2-7 2-4 Soil Gas Probe Transects 2-9 2-5 Nested Soil Gas Probe Construction Schematic 2-14 4-1 Schematic Isoconcentration Contours, South Transect, Macro-Purge Data 4-5 4-2 Schematic Isoconcentration Contours, South Transect, Micro-Purge Data 4-8 4-3 Plot of Macro-Purge versus Micro-Purge Results 4-17 4-4 Comparison of Soil Gas Collection Methods 4-17 4-5 Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods 4-18 Tables 2-1 Typical Characteristics of the A Clay 2-5 2-2 Properties of the Vadose Zone and A-Zone Aquifer 2-5 2-3 Macro-Purge Soil Gas Probe Installation Details 2-10 2-4 Groundwater Sample Summary 2-12 2-5 Soil Sample Summary 2-12 2-5 Soil Gas Duplicate Results 3-3 <	В	Passive	Diffusion Sampler SOP	
2-2 Groundwater Contours – A Zone Aquifer, January 2007	<u>Fig</u>	<u>ures</u>		
2-3 Trichloroethene Plume in the A Zone Aquifer, January 2007				
2-4 Soil Gas Probe Transects	2-2	Grou	ındwater Contours – A Zone Aquifer, January 2007	2-4
2-5 Nested Soil Gas Probe Construction Schematic	2-3			
4-1 Schematic Isoconcentration Contours, South Transect, Macro-Purge Data				
4-2Schematic Isoconcentration Contours, South Transect, Micro-Purge Data4-84-3Plot of Macro-Purge versus Micro-Purge Results4-174-4Comparison of Soil Gas Collection Methods4-174-5Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods4-18Tables2-1Typical Characteristics of the A Clay2-52-2Properties of the Vadose Zone and A-Zone Aquifer2-52-3Macro-Purge Soil Gas Probe Installation Details2-102-4Groundwater Sample Summary2-122-5Soil Sample Summary2-123-1Purge Volume Test Results3-33-2Summary of Soil Gas Duplicate Results3-34-1TCE and PCE Concentrations in Soil and Groundwater Samples4-24-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-74-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13				
4-3 Plot of Macro-Purge versus Micro-Purge Results 4-17 4-4 Comparison of Soil Gas Collection Methods 4-17 4-5 Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods 4-18 Tables 2-1 Typical Characteristics of the A Clay 2-5 2-2 Properties of the Vadose Zone and A-Zone Aquifer 2-5 2-3 Macro-Purge Soil Gas Probe Installation Details 2-10 2-4 Groundwater Sample Summary 2-12 2-5 Soil Sample Summary 2-12 2-5 Soil Sample Summary 3-3 3-2 Summary of Soil Gas Duplicate Results 3-3 4-1 TCE and PCE Concentrations in Soil and Groundwater Samples 4-2 4-2 TCE and PCE Concentrations in Macro-Purge Soil Gas Samples 4-3 4-3 TCE and PCE Concentrations in Micro-Purge Soil Gas Samples 4-7 4-4 TCE Concentrations in Tubing-Type Cluster Soil Gas Samples 4-9 4-5 Summary of VOCs in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units 4-13				
4-4 Comparison of Soil Gas Collection Methods				
4-5 Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods				
Tables 2-1 Typical Characteristics of the A Clay				
2-1 Typical Characteristics of the A Clay				
2-2Properties of the Vadose Zone and A-Zone Aquifer2-52-3Macro-Purge Soil Gas Probe Installation Details2-102-4Groundwater Sample Summary2-122-5Soil Sample Summary2-123-1Purge Volume Test Results3-33-2Summary of Soil Gas Duplicate Results3-44-1TCE and PCE Concentrations in Soil and Groundwater Samples4-24-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-94-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13	<u>Tal</u>	<u>oles</u>		
2-3Macro-Purge Soil Gas Probe Installation Details2-102-4Groundwater Sample Summary2-122-5Soil Sample Summary2-123-1Purge Volume Test Results3-33-2Summary of Soil Gas Duplicate Results3-44-1TCE and PCE Concentrations in Soil and Groundwater Samples4-24-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-94-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13	2-1			
2-4Groundwater Sample Summary2-122-5Soil Sample Summary2-123-1Purge Volume Test Results3-33-2Summary of Soil Gas Duplicate Results3-44-1TCE and PCE Concentrations in Soil and Groundwater Samples4-24-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-94-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13	2-2	Prop	erties of the Vadose Zone and A-Zone Aquifer	2-5
2-5 Soil Sample Summary	2-3			
3-1 Purge Volume Test Results	2-4	Grou	ındwater Sample Summary	2-12
3-2Summary of Soil Gas Duplicate Results3-44-1TCE and PCE Concentrations in Soil and Groundwater Samples4-24-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-94-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13				
4-1TCE and PCE Concentrations in Soil and Groundwater Samples4-24-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-94-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13				
4-2TCE and PCE Concentrations in Macro-Purge Soil Gas Samples4-34-3TCE and PCE Concentrations in Micro-Purge Soil Gas Samples4-74-4TCE Concentrations in Tubing-Type Cluster Soil Gas Samples4-94-5Summary of VOCs in Passive Diffusion Samplers4-104-6TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13				
 TCE and PCE Concentrations in Micro-Purge Soil Gas Samples				
 4-4 TCE Concentrations in Tubing-Type Cluster Soil Gas Samples				
 4-5 Summary of VOCs in Passive Diffusion Samplers				
4-6 TCE and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Units4-13				
	4-6 4-7		and PCE in Passive Diffusion Samplers, Concentrations Converted to Soil Gas Unimary of TCE Concentrations in Paired Macro-purge and Micro-purge Samples	

LIST OF ACRONYMS AND ABBREVIATIONS

AETL American Environmental Testing Laboratory, Inc.

AFB Air Force Base

bgs Below ground surface

DCA Dichloroethane
DCE Dichloroethene
DFA Difluoroethane
DL Detection Limit

DTSC Department of Toxic Substances Control EPA U.S. Environmental Protection Agency

GC Gas chromatograph

HPMG
 IRP Mobile Geochemistry
 IRP Installation Restoration Program μg/m³
 Micrograms per cubic meter

μg/L Micrograms per liter
MDL Method Detection Limit

ml Milliliter

ml/min Milliliters per minute msl Mean sea level NAS Naval Air Station

NERL National Exposure Research Laboratory

ND Not Detected

ORD Office of Research and Development

PDS Passive Diffusion Sampler PEEK Polyetheretherketone

PQL Practical Quantitation Limit

QA Quality Assurance

QAPP Quality assurance project plan

QC Quality Control

RPD Relative percent difference
Tetra Tech EMI Tetra Tech, EM Incorporated

TCE Trichloroethene

VOC Volatile organic compound

1.0 INTRODUCTION

Soil vapor data are widely used in site investigation and remediation projects to delineate volatile organic compound (VOC) vapor plumes, as a screening tool to refine soil and groundwater sampling efforts, to track the progress of soil remediation, and to assess the vapor intrusion pathway. Vapor intrusion is of particular concern, as it can be one of the main driving forces behind remediation at VOC sites. A critical issue in assessing the vapor intrusion pathway is the distribution and migration of VOCs from the subsurface source to the near surface environment.

It is commonly held that VOCs in a groundwater plume will migrate from groundwater through the vadose zone and either disperse to the atmosphere if the surface is uncovered, or accumulate beneath a cover (e.g., a building foundation), and potentially migrate into the indoor air of overlying structures (i.e. vapor intrusion). Numerical models have been developed to describe the migration of VOCs in the subsurface environment and to assess the effects of a building foundation or slab (Abreu and Johnson 2005). However, these models incorporate a variety of simplifying assumptions that have not been tested with field data. Overall, few data are available to document the behavior and distribution of VOC vapors through the soil column from groundwater to the surface/subslab environment.

Variation in sampling methods, field conditions, and analytical methods may result in variability in soil vapor measurements. This variability can be seen in differences in soil vapor data collected from the same location over time or collected from several adjacent locations at the same time. These sources of variation are essentially "noise" in the data, making it difficult to reach a clear understanding of the migration of VOCs in soils. A critical element in obtaining usable soil vapor data is the collection of representative samples. A variety of sample collection techniques are commonly used in the industry, but little data exist to evaluate the relative merits of the different methods.

There were two primary objectives for this investigation. The first objective was to measure the distribution of VOCs from the ground water source through the soil to the surface. This distributional information will be used to help improve our understanding of the mechanisms of vapor migration and intrusion. The second objective was to develop a robust data set of paired sample results with which to compare the innovative "micro-purge" sampling technique to the more common "macro-purge" technique. In the context of this investigation, "macro-purge" refers to probes constructed with standard tubing size (typically 1/8 inch) whereas "micro-purge" refers to probes constructed with a much smaller tubing size (0.01 inch). There were also two secondary objectives of this investigation: 1) install, retrieve, and analyze six sets of an aqueous-based, passive diffusion sampler (PDS) to evaluate the performance of this new sampling device, and 2) evaluate the effects of different tubing materials of construction on soil gas measurements.

2.0 SITE BACKGROUND AND PROBE LAYOUT

The field sampling and analysis portion of this project was conducted at IRP Site 14, located on Naval Air Station (NAS) Lemoore. NAS Lemoore is located in the California Central Valley, approximately 40 miles south of Fresno and 180 miles north of Los Angeles (Figure 2-1).

2.1 IRP SITE 14 SETTING AND BACKGROUND

IRP Site 14 is located in the operations area of NAS Lemoore and consists of maintenance buildings, hangars, and aircraft parking areas (Figure 2-1). Chlorinated VOCs are the primary contaminants that have been found in soil, soil gas, and groundwater at IRP Site 14 near the Building 180 hangar, the adjacent aircraft parking area, and near Buildings 188 and 170. The plume of chlorinated VOCs at IRP Site 14 is composed primarily of TCE and 1,1-dichloroethene (DCE), with minor amounts of 1,2-DCE, 1,1-dichloroethane (DCA), 1,2-DCA, and tetrachloroethene (PCE). Fuel residuals are also commingled with the chlorinated solvents; specific VOCs associated with the fuel residuals include trace amounts of benzene, toluene, ethylbenzene, and xylenes. Other VOCs detected at IRP Site 14 include chloroform and trichlorotrifluroethane (Freon-113). Two discernable VOC plumes are present at IRP Site 14: one emanating from the Building 180 area, and one located south of Building 170 (Figure 2-1).

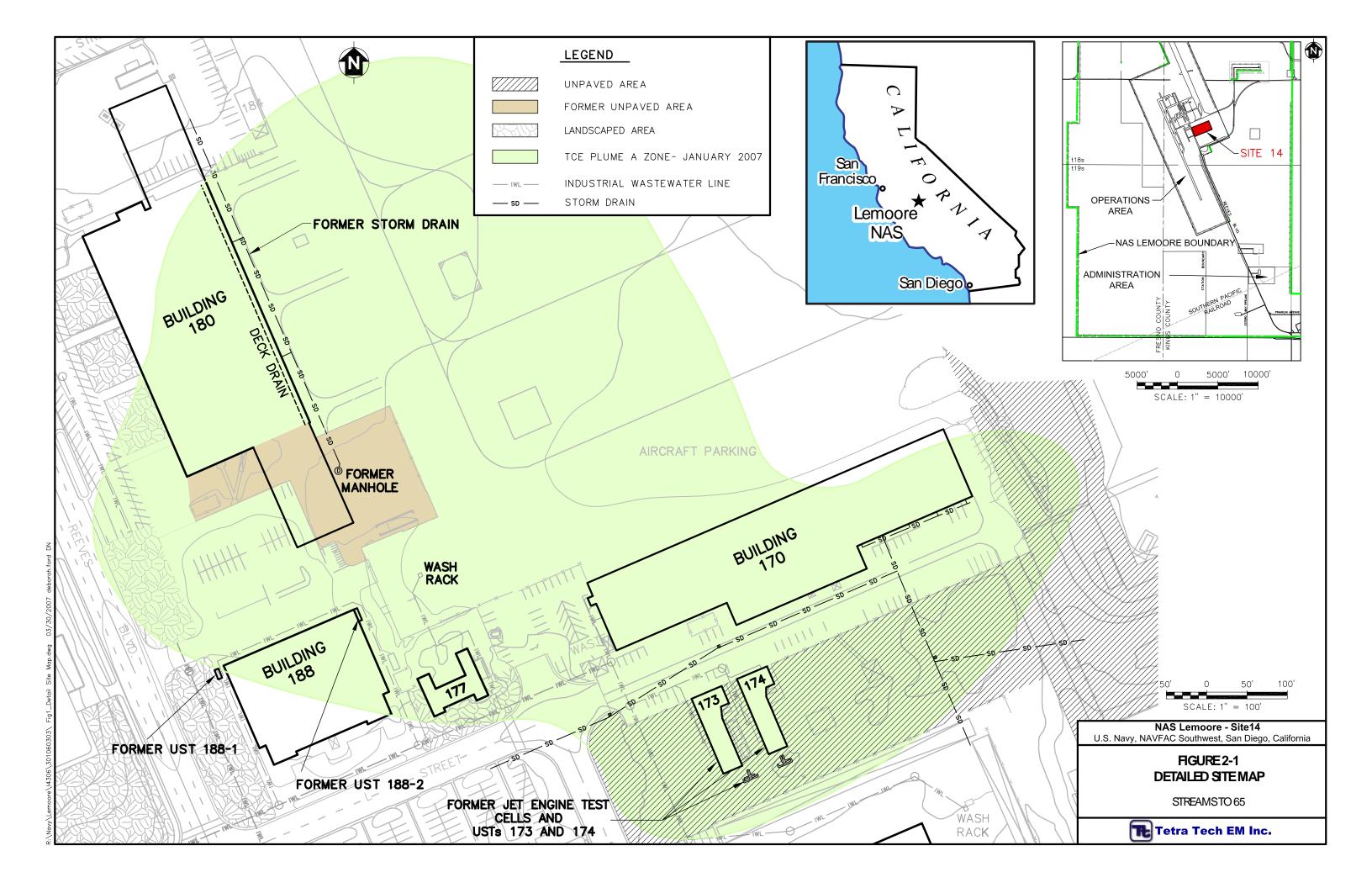
There are several suspected source areas including industrial wastewater lines (IWLs), storm drains, a manhole, a wash rack, and six former underground storage tanks (USTs). There are also possible spills or releases to unpaved areas or aircraft parking areas as a result of various practices associated with aircraft maintenance. However, all IWLs have been repaired or replaced, and all USTs at IRP Site 14 have been removed.

2.1.1 Geology and Hydrogeology

2.1.1.1 Regional Geologic Setting

NAS Lemoore is located in the San Joaquin Valley, the southern half of California's Central Valley, a 400-mile-long structural basin that borders the Sierra Nevada Mountain Range. The Central Valley is underlain by a large fault block that tilts down toward the west as the basement rock rose to the east to form the Sierra Nevada.

The valley has continuously subsided throughout the Pleistocene and Holocene periods. Subsidence steepened the gradients of rivers that emerge from the Sierra Nevada, promoting the development of alluvial fan deposits and their subsequent preservation. The fans themselves consist largely of coarse-grained channel deposits, as finer-grained sediments are discharged by floodwaters that spill out onto the plain beyond the toe of the fan. A similar process was active on the slopes of the Coast Ranges that borders the valley to the west.



NAS Lemoore is located immediately west of the trough of the valley. The trough is the lowest and most level portion of the valley. The ground surface elevation at NAS Lemoore is approximately 230 feet above mean sea level. Lakes and playas have occupied the trough repeatedly throughout Quaternary time, leaving behind lacustrine deposits. Lacustrine deposits at NAS Lemoore primarily consist of clay. The three most extensive lacustrine clays have all been mapped beneath NAS Lemoore; they are referred to as A Clay, C Clay, and E Clay. The A Clay underlies NAS Lemoore at a depth of approximately 50 feet below ground surface (bgs).

NAS Lemoore is also located near the outer edge of the Kings River alluvial fan. As a result, alluvial deposits interfinger with lacustrine clays beneath NAS Lemoore. Alluvial deposits are typically olive brown to olive gray in color and contain sporadic cemented horizons. In contrast to lacustrine deposits, alluvium is heterogeneous and contains stringers and lens-shaped sand channel deposits that grade laterally to silty floodplain deposits.

Sediments at IRP Site 14 have the characteristics of both alluvial and lacustrine environments, indicating pulses of alluvial deposition into a closed, possibly ephemeral lacustrine environment. Lacustrine environments generally dominate in periods of cooler, wetter climates, such as during periods of glaciation, the last of which occurred about the time the A Clay was deposited.

2.1.1.2 IRP Site 14 Geology and Hydrogeology

Geologic deposits beneath IRP Site 14 consist of an alluvial aquifer composed of sand, silty sand, and sandy silt interfingered with less permeable deposits of clayey silt and silty clay. The alluvial assemblage is interrupted by clay interbeds of lacustrine origin at various intervals.

Several groundwater bodies are present beneath IRP Site 14. The shallow uppermost groundwater body is designated as the A zone aquifer and has the A Clay defining its lower boundary. Depth to A zone groundwater ranges from 10 to 14 feet bgs. The predominant site-wide groundwater flow in the A zone aquifer is to the northeast, with a gradient on the order of 0.004 feet per foot (Figure 2-2).

The A-Clay appears to be laterally continuous across the site between depths of 45 and 50 feet (~35 feet below the groundwater table and the deepest soil vapor probes). Several cores through the A-Clay have been obtained for the IRP investigation at Site 14, and it is typically logged as a stiff clay with low plasticity but does not appear reduced (Table 2-1). Geotechnical samples collected in this interval exhibited a relatively high fraction of organic carbon of between 1 and 2 percent.

Alluvium in the A zone aquifer (approximately 12 to 45 feet bgs) consists largely of granular alluvium (predominantly sands), especially in the vicinity of the perceived TCE source locations. This granular alluvium appears to pinch out to the northeast of Site 14. Geotechnical samples collected below the water table in the 20- to 24- foot bgs range consisted of 70 to 80 percent sand with relatively high effective porosities (15 to 18 percent). However, these sandy soils are not representative of soils in the Site 14 vadose zone (where the STREAMS vapor probes are installed), which were visually logged as being predominantly silts and clays (to be verified by the soil samples collected during the equilibration study). Limited soil physical property data for the vadose zone and A-zone aquifer soils at Site 14 are presented in Table 2-2.

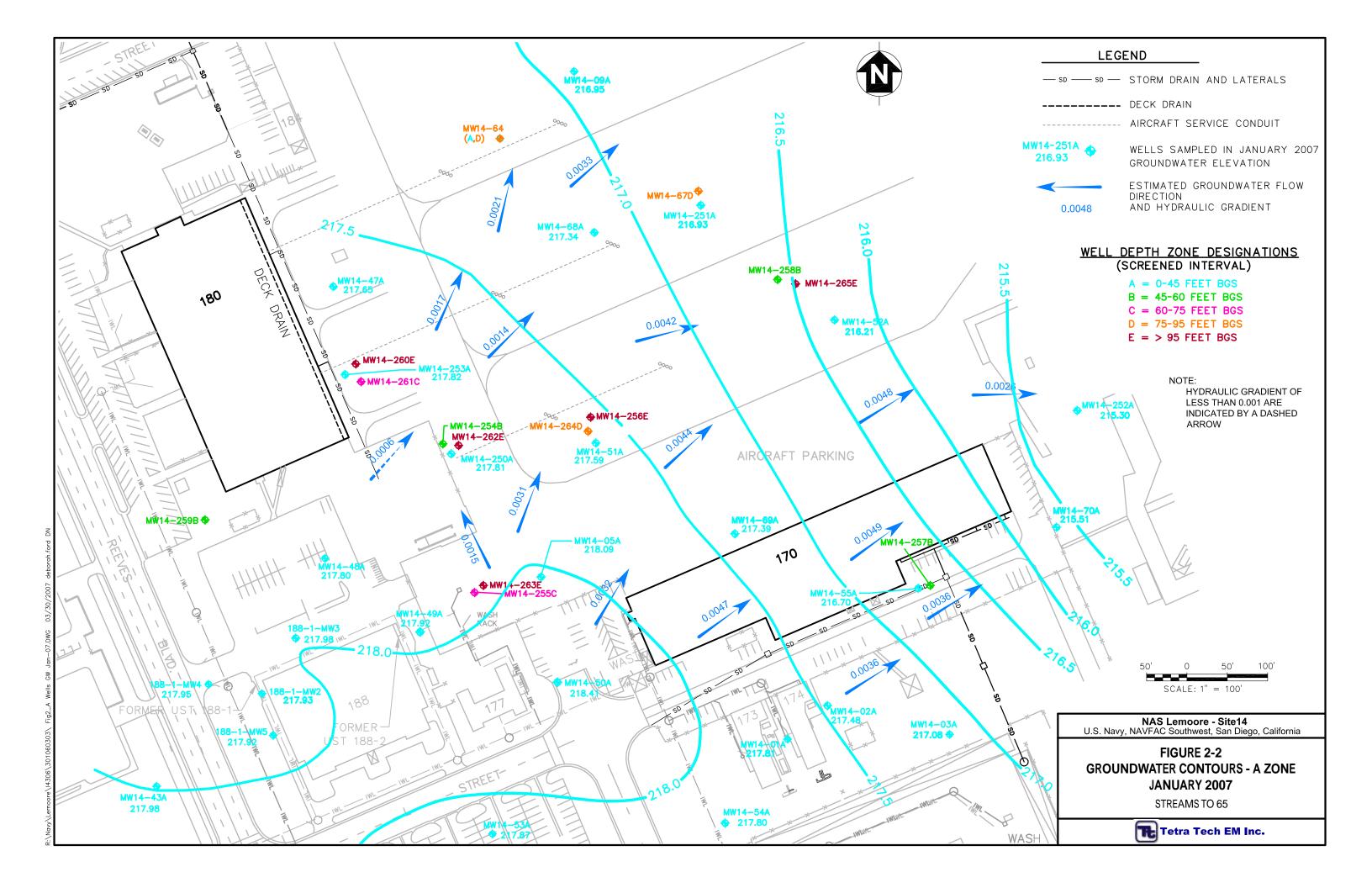


Table 2-1
Typical Characteristics of the A Clay

PARAMETER	RESULT
Clay (%)	21.72
Dry Bulk Density (lbs/ft ³)	96.77
Bulk Density (lbs/ft ³)	123.81
Moisture Content (%)	27.94
Fraction Organic Carbon (%)	1.40
Percent Gravel (%)	0.00
Percent Sand (%)	9.15
Percent Silt Or Percent Clay (%)	90.85
Porosity, Effective	0.03
Porosity, Total	0.40
Tetra Tech Borelog USCS Classification	clayey silt
Geotechnical Analysis Classification	lean clay

Table 2-2
Properties of the Vadose Zone and A-Zone Aquifer

PARAMETER	RESULT		
	Vadose zone	A-zone aquifer	
Clay (%)		4.2 – 6.1	
Dry Bulk Density (lbs/ft ³)		95.5 – 95.9	
Bulk Density (lbs/ft ³)		113.4 – 113.5	
Moisture Content (%)	12 – 37	18.3 – 18.8	
Fraction Organic Carbon (%)	0.28 - 0.48	0.80 - 0.90	
Percent Gravel (%)		0.0 - 0.6	
Percent Sand (%)		73 – 80	
Percent Silt Or Percent Clay (%)		19.7 – 27.1	
Porosity, Effective		0.15 – 0.18	
Porosity, Total	0.45 - 0.60	0.40 - 0.41	
Permeability, Effective (millidarcy)	4.3 – 3.7		
Tetra Tech Borelog USCS Classification	Clay and silt	medium sand	
Geotechnical Analysis Classification		silty sand	

The other two extensive clay layers beneath the site are the C- and E-Clays. The C-Clay is about 250 feet bgs and the E-Clay about 680-720 feet bgs (the E-Clay extends throughout the central valley and is also called the Corcoran Clay - it is the major confining unit in the valley). All three of the clay layers are lacustrine.

The hydrogeology of the shallow-upper aquifer beneath IRP Site 14 can be characterized as a heterogeneous alluvial aquifer with a relatively flat water table and limited vertical connection to underlying aquifer zones. The low-permeability silt and clay units within the aquifer may restrict lateral movement of contaminants. Downward movement of dissolved contaminants is likely impeded by the lacustrine clay interbeds, which may constitute locally continuous aquitards.

The quality of the shallow groundwater is generally poor because of elevated salinity that is likely a result of irrigation practices in an arid environment. For example, sulfate concentrations above 10,000 milligrams per liter (mg/L) are not uncommon at NAS Lemoore.

2.1.2 Chlorinated Solvent Plume Conditions

Groundwater monitoring results for TCE obtained in January 2007 are presented on Figure 2-3. TCE is the primary chemical of concern in groundwater. The most significant concentrations (above 1,000 micrograms per liter $[\mu g/L]$) are found adjacent to and east of Building 180 at monitoring wells MW14-51A, MW14-68A, MW14-250A, and MW14-254B; however, this is a high-traffic area used for aircraft parking and consists of an excessively thick 18- to 24-inch concrete slab; both of which rendered the area unsuitable for this study. The area used for this investigation is adjacent to and southeast of Building 170. TCE was detected in groundwater from monitoring well MW14-70A at a concentration of 230 $\mu g/L$ in January 2007 (Figure 2-3).

2.1.3 Selection of IRP Site 14

Site 14 was selected as a suitable location for this investigation because: (1) it provides a study area over a well-defined, shallow chlorinated solvent plume, (2) a variety of buildings with slab-on-grade foundations are present at the site, and (3) Tetra Tech EMI has an established working relationship with the environmental program staff at NAS Lemoore.

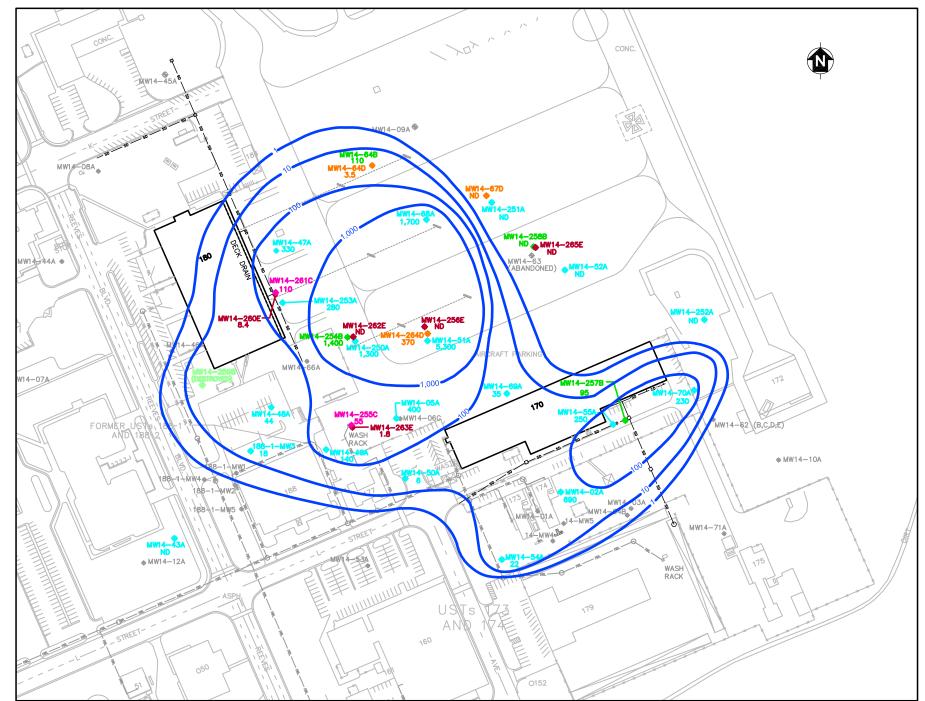
2.2 SOIL VAPOR PROBE TRANSECTS

The following paragraphs summarize the installation of the soil gas probe array at IRP Site 14. Details of the drilling and probe installation activities are presented in the *Sampling Trip Report* (Appendix A).

In the Quality Assurance Project Plan (QAPP) (Tetra Tech 2008), a sampling site over and adjacent to the former Building 173 foundation was proposed; however, during an initial mobilization to install sampling probes, it was determined that there were insufficient VOC concentrations in the soil vapor in this area (Appendix A). Therefore, the original transects were abandoned and an alternative site located adjacent to and east of Building 170 was selected (Figure 2-4).

2.2.1 Macro-Purge Vapor Probes

Two transects of six macro-purge sampling locations were established at the Site. The locations are in two lines (transects) oriented approximately east-west. Locations in the southern (primary) transect were designated ST-1 through ST-6. Locations in the northern (secondary) transect were designated NT-1 through NT-6 (Figure 2-4). Locations ST-1 and NT-1 are on the concrete pad adjacent to Building 170. Locations ST-2 and NT-2 are also on the concrete pad, but at the east edge of it. Locations ST-3 and NT-3 are off the paving, but immediately adjacent to the concrete pad. Locations ST-4, ST-5, ST-6, NT-4, NT-5, and NT-6 are in the unpaved area east of the concrete pad (Figure 2-4). At each location, soil vapor probes were installed at 2, 4, 7, and 10 feet bgs. At locations ST-1, ST-2, NT-1, and NT-2 subslab soil vapor probes were installed immediately below the concrete pad. In addition, at locations ST-3 and ST-6, "tubing type clusters" were installed at 6.25 feet bgs.



				SITE 1	4 TCE CONC		(µg/L)			
WELL		FIR:	ST ANNUAL		SECONE	ANNUAL		TRIAD		
	1	2	3	4	5	6	7	8	9 (QTR 1)	10 (QTR 2
DATE	NOV-99	FEB-00	MAY-00	AUG-00	JUNE-01	OCT-01	SEPT-05	MARCH-06	OCT-06	JAN-07
MW14-01A	49	60	53	50	56	61				
MW14-02A	43	68	74	70	61	72	310	210	45	690
MW14-03A	190	200	200	230	190	180				
MW14-04B	140 620	91 400	120 310	120 220	82 80	86 600	490	400	350	400
MW14-05A	ND	ND ND	ND ND	-			490	400		
MW14-07A MW14-08A	2	5	11	ND 6	ND					
MW14-08A MW14-09A	ND	ND ND	ND ND	ND ND	ND ND	ND				
	ND ND									
MW14-10A	ND ND	ND ND	ND ND	ND	ND	ND				
MW14-11A	ND ND	ND ND	ND ND	ND	ND	ND 				
MW14-12A	11	ND 14	ND 	ND 	ND 					
14-MW4		14	55	100		.				
14-MW5					100	110				
188-1-MW-1	9	ND	ND	12						
188-1-MW-2	15	ND	6	13	ND	6				
188-1-MW-3	20	15	16	30	18	20	18	20	19	18
188-1-MW-4	4	4	5	5	7	5				
188-1-MW-5	3	3	3	3	3					
MW14-43A	ND	ND	ND	ND		0.2			ND	ND
MW14-44A	ND	ND	ND	ND	ND					
MW14-45A	3	2	2	2		2				
MW14-46A	140	130	110	75	63	75				
MW14-47A	2,900	1,500	1,600	1,200	1,100	1,000	340	350	330	330
MW14-48A	100		110	100	110	150	53	43	46	44
MW14-49A	160	130	140	150	150	140	160	170	130	140
MW14-50A	4	3	3	2	ND	8	23	11	25	6
MW14-51A	1,300	3,200	3,200	3,300	970	3,000	4,700	5,100	5,700	5,300
MW14-52A	ND	ND	ND	ND	29	ND	ND	ND	ND	ND
MW14-53A	ND 10	ND	ND	ND	ND					
MW14-54A	12	16	12	17	18	25	9.5	11	20	22
MW14-55A	470	830	480	820	360	370	310	410	260	250
MW14-64B				0.5	ND 	3	35	75	110	110
MW14-64D			ND 				1.2	2.2	2.7	3.5
MW14-65A					ND 500	ND 700				
MW14-66A					500	380	1			
MW14-67D					ND 400	ND 500	ND 4.888	ND 0.500	ND	ND 4 700
MW14-68A					400	580	1,800	2,500	2,200	1,700
MW14-69A					18	38 5	35 97	37 150	35	35
MW14-70A MW14-71A					ND				190	230
					33	50				
MW14-250A							1,500	1,500	1,200	1,300
MW14-251A							ND	ND	ND	ND
MW14-252A	 						ND 700	ND	ND 700	ND
MW14-253A	 						320	380	320	280
MW14-254B							1,400	1,700	1,700	1,400
MW14-255C							64	71	52	55
MW14-256E							ND 57	0.21	ND OA	ND OF
MW14-257B								65 ND	84 ND	95 ND
MW14-258B							ND 2.1	ND 	ND 	ND
MW14-259B							ND	9.8		8.4
MW14-260E							24	9.8 55	11 85	110
MW14-261C MW14-262E							0.49	ND ND	ND ND	ND
MW14-263E							0.49	2.3	2.9	1.8
MW14-264D							59	2.3 81	370	340
MW14-265E							ND ND	ND ND	ND ND	ND ND
m w 197200E	1	1	1		1		טאון	טא ן	טא ן	טא ן

WELL DEPTH DESIGNATIONS

A = 0-45 FEET BGS B = 45-60 FEET BGS C = 60-75 FEET BGS D = 75-95 FEET BGS E = > 95 FEET BGS

NOTES:

TCE DETECTION LIMIT IS 0.14 μ g/L.

MW14-259B WAS DESTROYED BY CONSTRUCTION
ACTIVITIES PRIOR TO MARCH 2006 SAMPLING EVENT.



NAS Lemoore - Site14
U.S. Navy, NAVFAC Southwest, San Diego, California

FIGURE 2-3 TRICHLOROETHENE PLUME IN THE A ZONE AQUIFER JANUARY 2007

STREAMS TO 65



The tubing-type clusters consist of a bundle of six different tubing types, each with a gas-permeable tip, installed similarly to the other macro-purge soil gas probes. The tubing types were stainless steel, copper, polyetheretherketone (PEEK), Teflon, Nylaflow, and polyethylene. All of the tubing types were 1/8-inch diameter with the exception of the polyethylene, which was only available in 1/4-inch diameter.

The individual probes were identified by the location ID and the depth separated by a dash (e.g., the probe installed at 4 feet bgs at location ST-1 is designated ST1-4). The subslab probes were identified with the location ID and "SS" (e.g. ST1-SS). Table 2-1 provides a summary of the probe installation details.

The sampling probes were installed in pilot holes advanced to 10 feet bgs, or to groundwater at depths between 10.7 and 11.5 feet bgs, using a direct push system. Grab groundwater samples were collected at the seven locations advanced to groundwater (Table 2-2). Soil samples were collected from the pilot holes at the probe installation depths (i.e., 2, 4, 7, and 10 feet bgs) at each of the locations (Table 2-3). Soils encountered in the pilot holes consisted primarily of silty sands, clayey sands, and clays.

Soil vapor probes were constructed as follows. Approximately 3 inches of #3 sand was poured into the bottom of the pilot holes. A 1-inch long gas-permeable membrane sampling probe, attached to 1/8-inch diameter Nylaflow tubing, was then lowered through the drill rod to the top of the sand. Additional sand was then poured around the sampling probe until it extended approximately 2 inches above the membrane to form an approximately 6-inch long sand pack around the sample point (tubing type clusters were installed with an approximately 18-inch long sand pack to accommodate the larger purge volume that would be associated with purging multiple probes in quick succession). Approximately 12 inches of dry bentonite was then placed on top of the sand pack, followed by hydrated bentonite to approximately 3 inches below the next sampling depth (i.e. 7 feet bgs). This process was repeated to install four nested soil vapor probes in each pilot hole. At locations on the concrete pad, the subslab vapor probes were installed in the same way, but in a separate, 1-inch diameter hole that was drilled through the concrete with an electric hammer drill. The sampling probes were completed at the surface with approximately 18 inches of Nylaflow tubing extending out of the ground and a Swagelok valve was inserted into the end of the tubing. A schematic diagram of the probe installations is provided in Figure 2-5. The subslab vapor probes were installed 1 foot or less from the corresponding macro-probes (see Appendix A photograph 14 for visual example).

2.2.2 Micro-Purge Vapor Probes and Passive Diffusion Sampler Wells

Concurrently with the installation of the macro-purge vapor probes, EPA installed micro-purge vapor probes and passive diffusion sampler (PDS) wells. Micro-purge vapor probes were collocated with the macro-purge vapor wells in the primary transect (locations ST-1 through ST-6) at depths of 2, 4, 7, and 10 feet bgs. Subslab micro-purge vapor wells were not installed. The micro-purge vapor probes consisted of 0.01-inch inner diameter (ID) stainless steel tubing epoxied into steel point holders. The stainless steel tubing was threaded through the drill-rods, which were driven to the target sampling depth using the EPA-operated direct-push rig. Upon reaching the target depth, the drill rod was pulled up approximately 1 inch to expose the drop-off point to the vadose zone. The drill rods were left in place during sampling in order to seal out ambient air; thus micro-purge probes at multiple depths were installed in separate boreholes, rather than being nested in a single boring.

Passive diffusion sampler wells consisted of 2-inch diameter PVC blank casing, with an approximately 2-inch long screened interval at the bottom. The PDS wells were installed in boreholes drilled to the target sampling depth using the EPA operated direct push rig. PDS wells were installed at locations NT-5 and NT-6 in the abandoned transect adjacent to the former Building 173 foundation, and locations ST-1, ST-2, ST-3, and ST-5 in the primary transect. Subslab PDS wells were not installed.

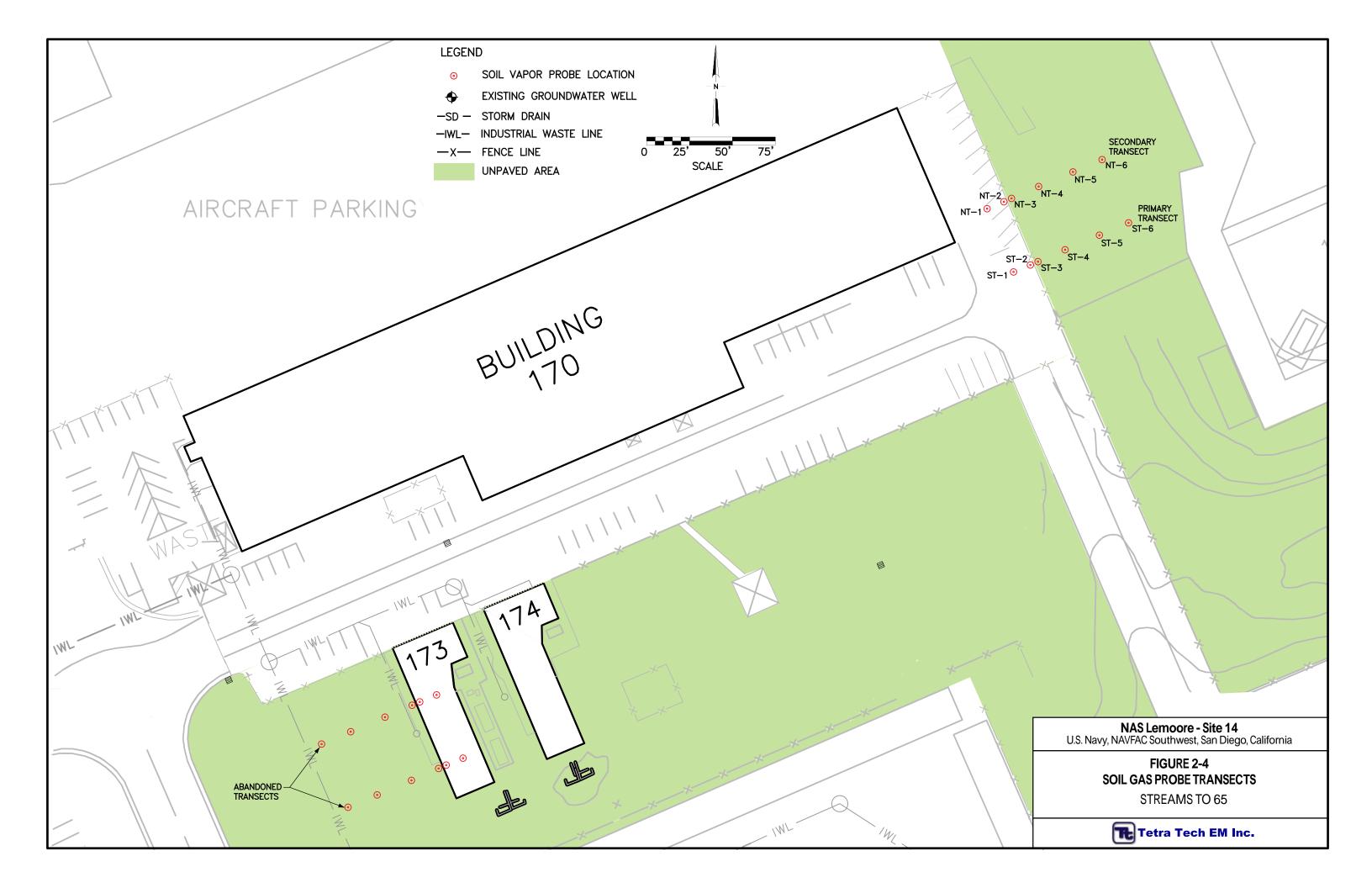


Table 2-3 Macro-Purge Soil Gas Probe Installation Details

Location ID	Probe ID	Installation Date	Coordinates (Easting/ Northing)	Distance between probes (feet) ¹	Probe Depth (feet bgs)	Length of Sandpack (inches)	System Volume (ml)
ST-1	ST1-SS	February 11	5988987.22/ 2674264.40	0	Subslab	2	2
	ST1-2				2	6	4
	ST1-4				4	6	6
	ST1-7				7	6	9
	ST1-10				10	6	12
ST-2	ST2-SS	February 11	5989001.35/ 2674270.68	15	Subslab	2	2
	ST2-2				2	6	4
	ST2-4				4	6	6
	ST2-7				7	6	9
	ST2-10				10	6	12
ST-3	ST3-2	January 18	5989007.09/ 2674271.47	5	2	6	4
	ST3-4				4	6	6
	ST3-7				7	6	9
	ST3-10				10	6	12
	Tubing				6.25	18	7 (28) 1
ST-4	ST4-2	January 22	5989024.26/ 2674281.30	20	2	6	4
	ST4-4				4	6	6
	ST4-7				7	6	9
	ST4-10				10	6	12
ST-5	ST5-2	January 22	5989042.33/ 2674289.17	20	2	6	4
	ST5-4				4	6	6
	ST5-7				7	6	9
	ST5-10				10	6	12
ST-6	ST6-2	January 18	5989060.69/ 2674296.24	20	2	6	4
	ST6-4				4	6	6
	ST6-7				7	6	9
	ST6-10				10	6	12
	Tubing				6.25	18	$7(28)^2$
NT-1	NT1-SS	February 12	5988972.30/ 2674294.76	0	Subslab	2	2
	NT1-2				2	6	4
	NT1-4				4	6	6
	NT1-7				7	6	9
_	NT1-10				10	6	12

Table 2-3 (cont.) Macro-Purge Soil Gas Probe Installation Details

Location ID	Probe ID	Installation Date	Coordinates (Easting/ Northing)	Distance between probes (feet)	Probe Depth (feet bgs)	Length of Sandpack (inches)	System Volume (ml)
NT-2	NT2-SS	February 12	5988986.95/ 2674302.07	15	Subslab	2	2
	NT2-2				2	6	4
	NT2-4				4	6	6
	NT2-7				7	6	9
	NT2-10				10	6	12
NT-3	NT3-2	January 22	5988990.25/ 2674303.85	5	2	6	4
	NT3-4				4	6	6
	NT3-7				7	6	9
	NT3-10				10	6	12
NT-4	NT4-2	January 18	5989011.36/ 2674313.23	20	2	6	4
	NT4-4				4	6	6
	NT4-7				7	6	9
	NT4-10				10	6	12
NT-5	NT5-2	February 12	5989026.97/ 2674321.15	20	2	6	4
	NT5-4				4	6	6
	NT5-7				7	6	9
	NT5-10				10	6	12
NT-6	NT6-2	February 12	5989045.05/ 2674328.40	20	2	6	4
	NT6-4				4	6	6
	NT6-7				7	6	9
	NT6-10				10	6	12

- Distance between probes is the distance from the next nearest probe. ST-1 and NT-1 are the starting points.
- Polyethylene tubing was 1/4 inch in diameter (4 ml/foot), all other tubing types were 1/8 inch in diameter (1 ml/foot). The system volume for the polyethylene tubing is shown in parentheses.

bgs - below ground surface ml - milliliters

Table 2-4 Groundwater Sample Summary

Location	Depth (feet bgs)	Sample ID	Collection Date
NT-1	11.2	NT1-GW	2/12/08
NT-3	NR	NT3-GW	1/22/08
NT-6	10.7	NT6-GW	2/12/08
ST-1	10.9	ST1-GW	2/11/08
ST-2	11.2	ST2-GW	2/11/08
ST-4	11.5	ST4-GW	1/22/08
ST-6	10.7	ST6-GW	2/12/08

Definitions:

NR not recorded GW groundwater

Table 2-5 Soil Sample Summary

Location	Depth (feet bgs)	Sample ID	Collection Date
NT-1	2	NT1-2	2/12/08
	4	NT1-4	2/12/08
	7	NT1-7	2/12/08
	10	NT1-10	2/12/08
NT-2	2	NT2-2	2/12/08
	4	NT2-4	2/12/08
	7	NT2-7	2/12/08
	10	NT2-10Q	2/12/08
NT-3	2	NT3-2	1/22/08
	4	NT3-4	1/22/08
	7	NT3-7	1/22/08
	10	NT3-10	1/22/08
ST-4	4	ST4-4	1/22/08
	7	ST4-7Q	1/22/08
	10	ST4-10	1/22/08
ST-5	10	ST5-10	1/22/08
	10	FieldDup4	1/22/08

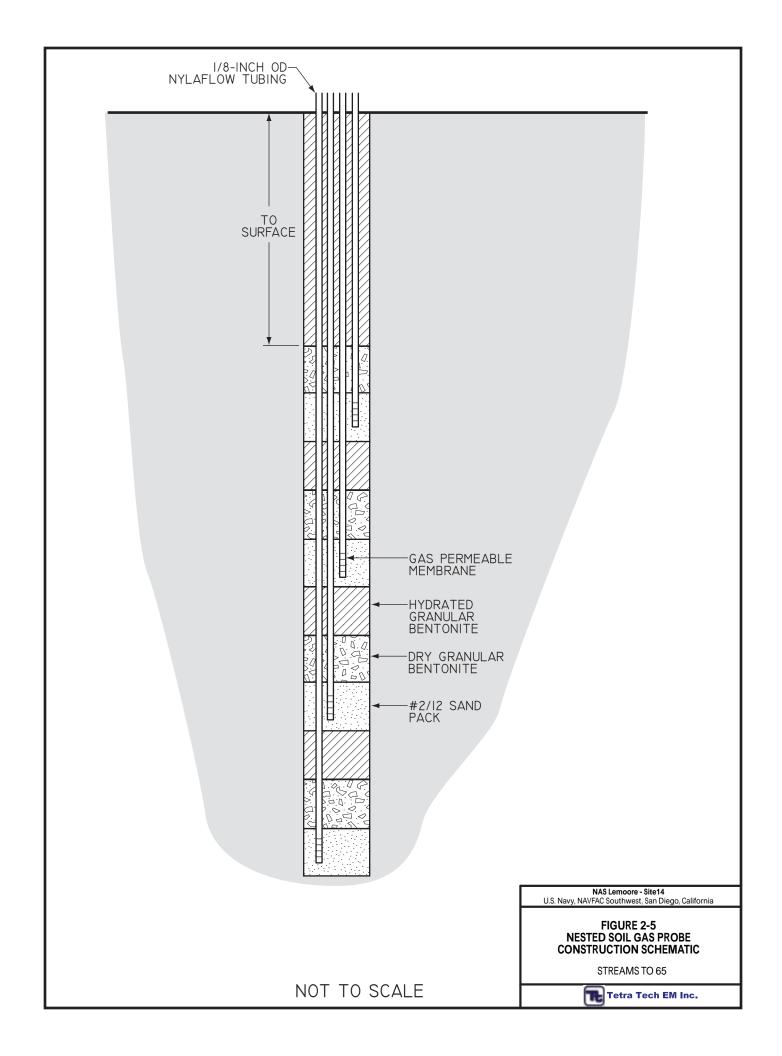
Definition:

Q sample used for matrix spike/matrix spike duplicate analyses

2.3 EXPERIMENTAL DESIGN

The primary objectives of this investigation were to: 1) assess the vertical and horizontal distribution of VOCs in soils from groundwater to the subslab/near-surface environment, and 2) develop a robust data set of paired sample results with which to compare the innovative "micro-purge" sampling technique to the more common "macro-purge" technique. There were also two secondary objectives: 1) compare VOC concentrations detected in "active" soil gas samples (i.e., gas samples obtained by applying a vacuum to a probe installed at depth) to the concentrations detected in PDSs, and 2) evaluate the effects of different tubing materials of construction on soil gas measurements.

To achieve the project objectives, the soil gas sampling transects described in Section 2.2 were installed at IRP Site 14 on NAS Lemoore, and multiple samples were collected from each probe to develop a three-dimensional picture of the distribution of VOCs in the vadose zone. Soil gas samples from collocated "micro-purge" wells were collected to assess the performance of the "micro-purge" technique in relation to the standard "macro-purge" technique. Samples from wells with different tubing types were collected to evaluate the impact of tubing type. Finally, PDSs were installed and retrieved to allow comparison of PDS results to active soil gas measurement results.



3.0 SAMPLING AND ANALYSIS

The following sections describe the sampling and analysis procedures used during the investigation.

3.1 SAMPLE COLLECTION

Active soil gas sample collection consists of two primary components. The first is purging the probe to remove ambient air and any other gases not representative of subsurface conditions at the target sampling depth. The second is collection of the soil gas sample into an appropriate container for transfer to the analytical instrument. Based on the results of five purge tests conducted at a subset of the probes and the results of the Task Order (TO) 05 investigation (EPA 2007), the volume of gas removed from each probe prior to sampling (the purge volume) was set at three system volumes (i.e., the volume of the gas permeable tip plus the tubing). The system volumes for the macro-purge probes are provided in Table 2-1. Probes were purged at a rate of approximately 200 milliliters per minute (ml/min). The sample volume from macro-purge probes was set at 20 ml, and the samples were collected in 60-ml, disposable, polypropylene syringes. Soil gas sampling commenced after a minimum equilibration time of 14 days.

Samples from micro-purge soil gas probes were collected in 2.5-ml glass syringes. System volumes of the micro-purge probes were 2.025 ml for the 2-foot probes, 2.075 ml for the 4-foot probes, 2.125 ml for the 7-foot probes, and 2.150 ml for the 10-foot probes. One system volume was purged from each micropurge soil gas probe prior to collecting a 2.5-ml sample. Soil gas samples were analyzed on-site in a mobile laboratory operated by HPMG.

Intact soil cores were retrieved from the transect boreholes in clear, acetate sleeves used as liners in the drill rod. Soil sample aliquots for VOC analyses were collected from the acetate sleeves and transferred directly to VOA vials containing methanol and sodium bisulfate preservatives in accordance with EPA SW-846 Method SW5035 (EPA 1996). Soil samples were submitted to American Environmental Testing Laboratory, Inc. (AETL), located in Burbank, California for VOC analysis via EPA SW-846 Method 8260B (EPA 1997).

Grab groundwater samples were collected by placing 1-inch diameter slotted PVC screen down the borehole to a depth approximately 1 foot below the static water level and then allowing the groundwater level to re-equilibrate. After the water level stabilized, standing water (one volume) was purged from the screen using a bailer, and then a sample was collected in VOA vials containing hydrochloric acid preservative. Groundwater samples were submitted to AETL for VOC analysis via EPA SW-846 Method 8260B.

Passive Diffusion Samplers were inserted into the PDS wells in accordance with EPA instructions (Appendix B) and left in place for a minimum of 30 days to equilibrate. The PDSs were then removed from the wells and submitted to AETL for VOC analysis via EPA SW-846 Method 8260B.

3.2 MOBILE LABORATORY

Soil gas samples collected for this investigation were analyzed on-site using a mobile laboratory operated by HPMG. Details of the analytical method, equipment, and detection limit (DL) are provided below.

3.2.1 Analytical Method

Soil gas samples were analyzed by direct injection using EPA SW-846 Method 8021 (EPA 1996). Method 8021 is a gas chromatography method using a photoionization detector (PID) and an electron capture detector (ECD). This method is faster, more sensitive, and has a larger linear dynamic operating

range than gas chromatography/mass spectrometry (GC/MS) methods. The contaminants of concern at IRP Site 14 (i.e., TCE and PCE) had been previously identified based on IRP investigation data (Section 2.1.2); therefore, the compound identification advantages of GC/MS were not warranted. The target compound list for this project was limited to TCE and PCE.

Soil gas samples collected during this investigation were sub-sampled using a 1.0-ml syringe and injected directly into the gas chromatograph injection port. The injection syringes were flushed with the sample two times prior to injection to ensure the injected aliquot was representative of the field sample and were flushed several times with clean air between injections or discarded.

The analyses were performed following EPA method 8000 protocols, modified for soil gas. Modifications from the EPA method consisted of the project-specific analyte list, absence of matrix spike samples and surrogates, and changes in calibration protocols as discussed in Section 3.3.2.

3.2.2 Equipment

The following equipment was utilized by the mobile laboratory for this project.

• **Instrument:** SRI 8610 Gas Chromatograph

• **Column:** 30 meter DB-61, megabore capillary.

• **Carrier flow:** Nitrogen at 10 ml/min.

• **Detectors:** PID and ECD.

• **Column oven:** 80°C isothermal

3.2.3 Detection Limits

The DL for the target compounds was $50 \mu g/m^3$.

3.3 QUALITY ASSURANCE/QUALITY CONTROL

3.3.1 Field Quality Control Protocols

Leak tests were performed on five probes to monitor the integrity of the probe system and surface seals. Leak tests were conducted at probes ST2-2, ST4-2, ST6-2, NT1-2, and NT3-2. The 2-foot bgs probes were selected for leak checks as they are considered the most likely to fail. Leak tests were conducted by placing a cloth rag in a plastic bag, saturating the rag with 1,1-difluoroethane (DFA), placing the bag over the surface completion of the probe, and then purging the probe normally and collecting a sample. If DFA was detected in the sample, then it would have been concluded that the probe was not sealed properly from the atmosphere. Leak check samples were collected in Tedlar bags and sent back to HPMG's fixed laboratory for analysis, as the mobile laboratory was not equipped to analyze for DFA. No DFA was detected in any of the samples associated with the leak checks.

Purge volume tests were conducted to determine the optimum volume of gas to purge from each probe prior to sample collection. Purge tests were conducted on probes ST1-10, ST2-10, and ST3-10 (Table 3-1). The purge tests consisted of purging one or two system volume and then collecting a sample, purging another one or two system volumes (for a total of two or three) and collecting a sample, and purging another two or three system volumes (for a total of five), and collecting a sample. The sample results were then compared to determine what purge volume yielded the highest measured VOC concentrations. The results of the purge volume tests did not convincingly indicate that any tested purge

volume was superior to the others. Therefore, the standard three system-volume purge was used for subsequent sampling.

Table 3-1
Purge Volume Test Results (µg/m³)
IRP Site 14
NAS Lemoore, California

Analyte Detection Limit		TCE 50		PCE 50
Sample ID	Date			
ST1-10 1PV	25-Feb-08	>29,000	E	590
ST1-10 2PV	25-Feb-08	19,000		ND
ST1-10 5PV	25-Feb-08	24,000		ND
ST2-10 2PV	26-Feb-08	1,700		ND
ST2-10 3PV	26-Feb-08	1,600		ND
ST2-10 5PV	26-Feb-08	1,600		ND
ST3-10 2PV	25-Feb-08	1,400		ND
ST3-10 3PV	25-Feb-08	2,200		ND
ST3-10 5PV	25-Feb-08	420		ND

Definitions:

DL - detection limit

E - estimated (exceeded calibration range)
micrograms per cubic

 $\mu g/m^3$ - meter

ND - not detected; result is less than the DL

PCE - tetrachloroethene TCE - trichloroethene

Field duplicate samples were collected to measure the reproducibility and precision of the total sampling system. Field duplicate samples were collected at a rate of approximately 11 percent from macro-purge probes and 14 percent from micro-purge probes. All quantifiable soil gas field duplicate results were within the QAPP specified criterion of ±40 relative percent difference (RPD). A summary of the duplicate results for soil gas samples is provided in Table 3-2. One field duplicate soil sample was analyzed for the set of 16 field samples analyzed (rate of approximately 6 percent). The results were not detected (ND) for all analytes, therefore an RPD could not be calculated. Field duplicate groundwater samples were not collected.

3.3.2 Mobile Laboratory Quality Control Protocols

The laboratory data package, including Chain-of-Custody forms and sample results is provided in Appendix C.

3.3.2.1 Laboratory Data Logs

The field chemist maintained analytical records, including date and time of analysis, sampler's name, chemist's name, sample identification number, concentrations of compounds detected, calibration data, and any unusual conditions.

Table 3-2 Summary of Soil Gas Duplicate Results (µg/m³) IRP Site 14 NAS Lemoore, California

			TCE		PCE				
Probe	Date	Primary	Duplicate	RPD	Primary	Duplicate	RPD		
Macro-Purge									
NT2-2	2/26/2008	ND	ND	NA	ND	ND	NA		
NT4-7	2/26/2008	ND	ND	NA	ND	ND	NA		
NT6-4	2/26/2008	ND	ND	NA	ND	ND	NA		
ST2-7	2/27/2008	2,000	1,700	16%	74	ND	NA		
ST4-4	2/27/2008	ND	ND	NA	ND	ND	NA		
ST6-10	2/27/2008	ND	ND	NA	ND	ND	NA		
NT2-2	2/28/2008	ND	ND	NA	ND	ND	NA		
NT4-7	2/28/2008	ND	ND	NA	ND	ND	NA		
NT6-4	2/28/2008	ND	ND	NA	ND	ND	NA		
ST2-7	2/28/2008	2,000	1,700	16%	76	ND	NA		
ST4-4	2/28/2008	ND	ND	NA	ND	ND	NA		
ST6-10	2/29/2008	ND	ND	NA	ND	ND	NA		
Micro-Purge									
ST2MP-7	2/27/2008	2,800	3,000	7%	160	190	17%		
ST4MP-4	2/27/2008	ND	ND	NA	ND	ND	NA		
ST6MP-10	2/27/2008	co-elute	co-elute	NA	ND	ND	NA		
ST2MP-7	2/28/2008	3,300	2,900	13%	250	240	4%		
ST4MP-4	2/28/2008	ND	75	NA	ND	ND	NA		
ST6MP-10	2/29/2008	coelute	ND	NA	ND	ND	NA		

Definitions:

co-elute - An interfering compound eluted at the same time as the target analyte and prevented

identification/quantitation

 $\mu g/m^3$ - micrograms per cubic meter

NA - not applicable

ND - not detected; result is less than the DL

PCE - tetrachloroethene

RPD - relative percent difference

TCE - trichloroethene

3.3.2.2 Instrument Calibration

An initial 3-point calibration curve was performed at the start of and used throughout the project. Although EPA method 8000 requires the use of five levels for an initial calibration curve; existing soil gas guidance from the California Environmental Protection Agency Department of Toxic Substances Control (DTSC 2003) only requires three calibration levels. A linearity check of the calibration curve for each compound was performed by computing a correlation coefficient and an average response factor.

Continuing calibration verification samples were analyzed once a day as specified in the QAPP (Tetra Tech 2008). These standards were prepared from a traceable source at the middle concentration of the

calibration curve. Acceptable continuing calibration agreement was set at ± 20 percent to the average response factor from the calibration curve.

3.3.2.3 Blanks

Laboratory blanks were analyzed at the start of each field day. A total of five blank samples were run during the sampling conducted on February 25 through 29, 2008.

3.3.3 Project QAPP Deviations and Additions

During the course of implementing the program, several deviations occurred from the guidelines discussed in the QAPP (Tetra Tech 2008). Specific deviations are listed below.

- The QAPP stated that the sampling transects would be located on and adjacent to the concrete slab foundation of former Building 173; however, it was found that the VOC concentrations in soil gas in this area were insufficient for the purposes of this investigation. Therefore, an alternative location was selected adjacent to Building 170 (Section 2.2).
- The QAPP stated that soil samples collocated with each soil gas probe would be collected and analyzed for VOCs. Soil samples were collected as proposed in the QAPP; however, due to the very low VOC concentrations present in the soils, only a subset of the soil samples collected were analyzed.

3.3.4 QC Sample Results

All field quality control sample results were compliant with guidelines and QC criteria prescribed in the QAPP. Twelve duplicate field samples were collected from the macro-purge probes and six were collected from the micro-purge probes. All of the results were compliant with the QAPP specified RPD criterion of 40 percent.

All of the laboratory QC sample results were compliant with the QAPP specified criteria. Five lab blanks were analyzed and the results were non-detect for all five. All of the initial calibrations and daily calibration verifications passed the QAPP specified criteria and are on file at the HPMG offices.

The data generated during this investigation are deemed to be of sufficient quality to be usable for their intended purpose (see Appendix C).

4.0 RESULTS AND DISCUSSION

4.1 DATA SUMMARY

4.1.1 Soil Sample Results

The results for soil samples, which were collected from selected borings (locations NT-1, NT-2, NT-3, ST-4, and ST-5), are presented in Table 4-1. The highest VOC concentrations were detected beneath the slab at location NT-1, with the maximum concentration at 7 feet bgs and a relatively low concentration at 2 feet bgs. At location NT-2, at the edge of the slab, only very low concentrations were detected, and only at 7 and 10 feet bgs. At location NT-3, in the unpaved area but immediately adjacent to the slab, all soil samples results for VOCs were ND. All soil samples from locations ST-4 and ST-5 were also ND for VOCs.

4.1.2 Groundwater Sample Results

The results for groundwater samples, which were collected as grab samples from selected borings (locations NT-1, NT-3, NT-6, ST-1, ST-2, ST-4, and ST-6), are presented in Table 4-1. Similar to the soil samples, the highest concentrations detected in groundwater were from samples beneath the slab, with concentrations decreasing rapidly away from the slab. The maximum TCE groundwater concentration was 240 μ g/L, which occurred in the sample from ST-1, located on the slab. The sample from ST-2, located on but at the edge of, the slab, contained 30.4 μ g/L of TCE, and the sample from ST-4, located approximately 30 feet from the edge of the slab, contained only 1.4 μ g/L of TCE. Similarly, the sample from location NT-1 contained 24.7 μ g/L of TCE and the sample from location NT-3 contained only 1.7 μ g/L of TCE.

4.1.3 Macro-Purge Soil Gas Samples

The macro-purge probes were sampled multiple times over a period of four days to generate the data for a vapor concentration profile. Specifically, probes ST1-SS, -2, and -4 were sampled three times and the other probes were sampled twice. No probes were sampled more than once per day. Each probe was first purged, as described in Section 3.1, prior to collecting a sample and all samples were analyzed in the mobile laboratory. The analytical results are summarized in Table 4-2. TCE concentrations detected along the southern transect (ST-1 through ST-6) ranged from a minimum of 62 μ g/m³ to a maximum of 26,000 μ g/m³; PCE concentrations ranged from 59 to 410 μ g/m³. In the northern transect, TCE concentrations ranged from 120 to 6,300 μ g/m³ and PCE concentrations ranged from 74 to 92 μ g/m³. TCE and PCE were not detected in any of the probes at locations ST-4, ST-5, or ST-6, nor in the 2-foot bgs probe at ST-3. Similarly, TCE and PCE were not detected in any of the probes at locations NT-4, NT-5, or NT-6, nor in the subslab or 2-foot bgs probes at NT-2, or the 2-foot and 4-foot probes at NT-3.

The mean concentrations of TCE in the soil gas from Table 4-2 were used to generate a profile of the soil gas concentration along the sampling transect (Figure 4-1). TCE was used to generate this profile because it was present in higher concentrations and more consistently than PCE. To better visualize the data, isoconcentration contours are indicated in color in Figure 4-1, with darker colors representing higher concentrations.

The profile in Figure 4-1 shows that TCE concentrations were highest in the 10-foot bgs probes, near the water table, and decreased with increasing distance from the water table. In the horizontal direction, TCE concentrations were highest in probes beneath the slab and decreased with increasing distance away from the slab.

Table 4-1
TCE and PCE Concentrations in Soil and Groundwater Samples
IRP Site 14

NAS Lemoore, California

Location	Depth	Sample ID	Date	Units	RL	TCE	PCE
NT-1	2	NT1-2	12-Feb-08	μg/kg	0.5	1.80	ND
	4	NT1-4	12-Feb-08	μg/kg	0.5	15.9	ND
	7	NT1-7	12-Feb-08	μg/kg	0.5	18.7	ND
	10	NT1-10	12-Feb-08	μg/kg	0.5	10.4	ND
	11.2	NT1-GW	12-Feb-08	$\mu g\!/\!L$	0.5	24.7	ND
NT-2	2	NT2-2	12-Feb-08	μg/kg	0.5	ND	ND
	4	NT2-4	12-Feb-08	μg/kg	0.5	ND	ND
	7	NT2-7	12-Feb-08	μg/kg	0.5	1.20	ND
	10	NT2-10Q	12-Feb-08	μg/kg	0.5	1.30	ND
NT-3	2	NT3-2	22-Jan-08	μg/kg	0.5	ND	ND
	4	NT3-4	22-Jan-08	μg/kg	0.5	ND	ND
	7	NT3-7	22-Jan-08	μg/kg	0.5	ND	ND
	10	NT3-10	22-Jan-08	μg/kg	0.5	ND	ND
	NR	NT3-GW	22-Jan-08	$\mu g/L$	0.5	1.70	ND
NT-6	10.7	NT6-GW	12-Feb-08	$\mu g/L$	0.5	ND	ND
ST-1	10.9	ST1-GW	11-Feb-08	μg/L	0.5	240	1.36
ST-2	11.2	ST2-GW	11-Feb-08	$\mu g/L$	0.5	30.4	ND
ST-4	4	ST4-4	22-Jan-08	μg/kg	0.5	ND	ND
	7	ST4-7Q	22-Jan-08	μg/kg	0.5	ND	ND
	10	ST4-10	22-Jan-08	μg/kg	0.5	ND	ND
	11.5	ST4-GW	22-Jan-08	$\mu g/L$	0.5	1.40	ND
ST-5	10	ST5-10	22-Jan-08	μg/kg	0.5	ND	ND
	10	DUP	22-Jan-08	μg/kg	0.5	ND	ND
ST-6	10.7	ST6-GW	12-Feb-08	μg/L	0.5	ND	ND

Definitions:

DUP - duplicate sample

EPA - Environmental Protection Agency

GW - groundwater

 $\begin{array}{lll} \mu g/kg & \text{- milligrams per kilogram} \\ \mu g/L & \text{- micrograms per liter} \\ MDL & \text{- method detection limit} \end{array}$

NA - not analyzed

ND - not detected; result is less than the MDL

PCE - tetrachloroethene

Q - matrix spike or matrix spike duplicate sample

TCE - trichloroethene

Note

Analyses performed in mobile laboratory.

Table~4-2 TCE and PCE Concentrations in Macro-Purge Soil Gas Samples (µg/m³) IRP Site 14 NAS Lemoore, California

Collection Date			26-Feb-08		08 27-Feb-08		28-Fe	28-Feb-08		eb-08	Mean Concentration1	
Analyte		1.3985	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE
Detection Li	nit		50	50	50	50	50	50	50	50		
-	Sample	Probe Depth										
Sample ID	Location	(ft bgs)										
ST1-SS	ST-1	0.5	750	ND	540	ND	720	ND	NS	NS	670	N/A
ST1-2	ST-1	2	6,500	110	5,900	87	7,000	66	NS	NS	6,500	88
ST1-4	ST-1	4	23,000	300	14,000	<250	10,000	<250	NS	NS	16,000	300
ST1-7	ST-1	7	NS	NS	21,000	320	18,000	250	NS	NS	20,000	285
ST1-10	ST-1	10	NS	NS	23,000	360	26,000	410	NS	NS	25,000	385
ST2-SS	ST-2	0.5	NS	NS	140	ND	130	ND	NS	NS	140	N/A
ST2-2	ST-2	2	NS	NS	210	ND	170	ND	NS	NS .	190	N/A
ST2-4	ST-2	4	NS	NS	590	ND	510	ND	NS	NS	550	N/A
ST2-7	ST-2	7	NS	NS	2,000	74	2,000	76	NS	NS	2,000	75
ST2-7 DUP	ST-2	7	NS	NS	1,700	ND	1,700	ND	NS	NS	1,700	N/A
ST2-10	ST-2	10	NS	NS	2,200	120	1,600	59	NS	NS	1,900	90
ST3-2	ST-3	2	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST3-4	ST-3	4	NS	NS	83	ND	62	ND	NS	NS	73	N/A
ST3-7	ST-3	7	NS	NS	430	ND	450	ND	NS	NS	440	N/A
ST3-10	ST-3	10	NS	NS	1,500	ND	NS	NS	NS	NS	1,500	N/A
ST4-2	ST-4	2	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST4-4	ST-4	4	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST4-4 DUP	ST-4	4	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST4-7	ST-4	7	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST4-10	ST-4	10	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST5-2	ST-5	2	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST5-4	ST-5	4	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST5-7	ST-5	7	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST5-10	ST-5	10	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST6-2	ST-6	2	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST6-4	ST-6	4	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST6-7	ST-6	7	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST6-10	ST-6	10	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A
ST6-10 DUP	ST-6	10	NS	NS	ND	ND	NS	NS	ND	ND	N/A	N/A

4-3

Table 4-2 TCE and PCE Concentrations in Macro-Purge Soil Gas Samples (µg/m³) IRP Site 14 NAS Lemoore, California

Collection Date Analyte			26-Feb-08		27-Feb-08		28-Feb-08		29-Feb-08		Mean Concentration	
			TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE
Detection Li	mit		50	50	50	50	50	50	50	50		
	Sample	Probe Depth										
Sample ID	Location	(ft bgs)										
NT1-SS	NT-I	0.5	540	ND	NS	NS	460	ND	NS	NS	500	N/A
NT1-2	NT-I	2	1,700	ND	NS	NS	1,900	ND	NS	NS	1,800	N/A
NT1-4	NT-I	4	3,000	ND	NS	NS	2,600	ND	NS	NS	2,800	N/A
NT1-7	NT-1	7	5,100	ND	NS	NS	5,600	92	NS	NS	5,400	92
NT1-10	NT-1	10	6,100	74	NS	NS	6,300	85	NS	NS	6,200	80
NT2-SS	NT-2	0.5	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT2-2	NT-2	2	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT2-2 DUP	NT-2	2	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT2-4	NT-2	4	150	ND	NS	NS	120	ND	NS	NS	140	N/A
NT2-7	NT-2	7	440	ND	NS	NS	420	ND	NS	NS	430	N/A
NT2-10	NT-2	10	720	ND	NS	NS	600	ND	NS	NS	660	N/A
NT3-2	NT-3	2	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT3-4	NT-3	4	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT3-7	NT-3	7	220	ND	NS	NS	230	ND	NS	NS	230	N/A
NT3-10	NT-3	10	380	ND	NS	NS	350	ND	NS	NS	370	N/A
NT4-2	NT-4	2	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT4-4	NT-4	4	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT4-7	NT-4	7	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT4-7 DUP	NT-4	7	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT4-10	NT-4	10	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT5-2	NT-5	2	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT5-4	NT-5	4	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT5-7	NT-5	7	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT5-10	NT-5	10	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT6-2	NT-6	2	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT6-4	NT-6	4	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT6-4 DUP	NT-6	4	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT6-7	NT-6	7	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A
NT6-10	NT-6	10	ND	ND	NS	NS	ND	ND	NS	NS	N/A	N/A

Definitions:

- rounded to two significant figures 1

DUP - duplicate sample

μg/m³ - micrograms per cubic meter

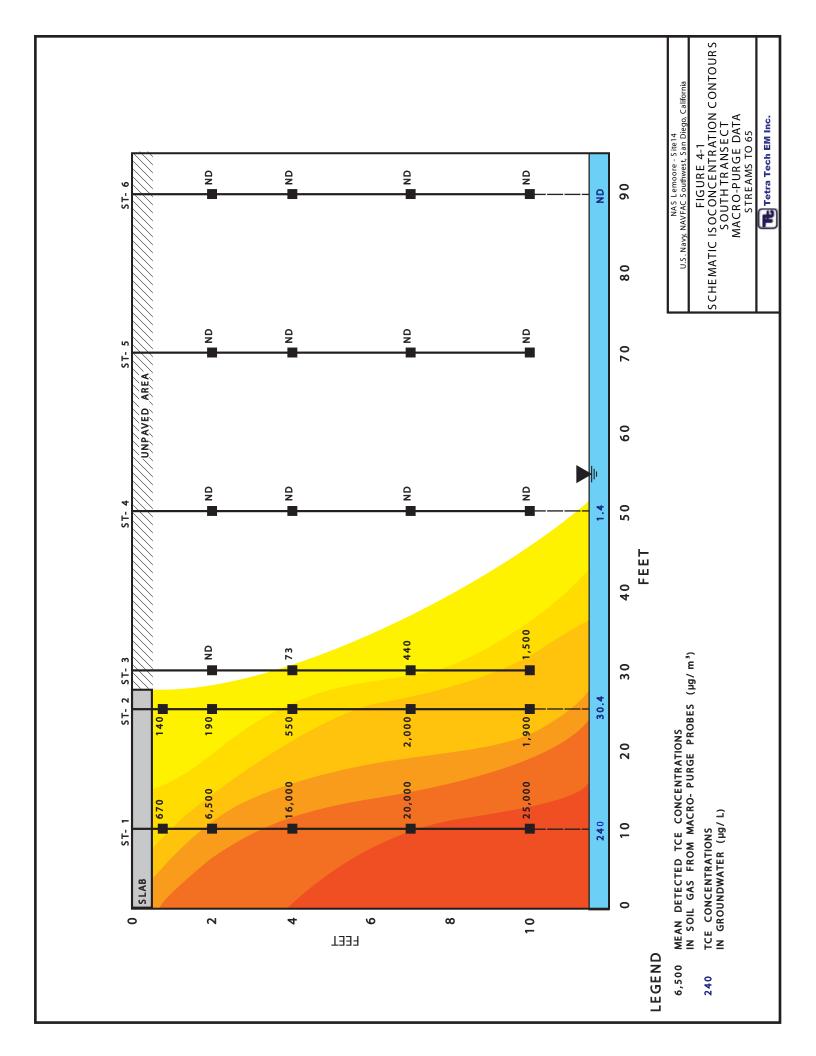
N/A - not applicable

NS - not sampled

ND - not detected

PCE - tetrachloroethene

SS - sub slab TCE - trichloroethene



4.1.4 Micro-Purge Soil Gas Samples

Micro-purge soil gas probes were only installed along the southern transect. Each of the micro-purge probes was sampled on at least two different days. The 4-foot bgs probe at ST-1 was sampled three times. The samples were analyzed in the mobile laboratory operated by HPMG. The analytical results are summarized in Table 4-3. Detected TCE concentrations ranged from 75 to 43,000 μ g/m³ and PCE concentrations ranged from 51 to 1,200 μ g/m³. With the exception of a duplicate sample from the 4-foot bgs sample at ST-4MP, TCE were not detected in any of the probes at locations ST-4MP, ST-5MP, or ST-6MP; however; PCE was detected at low concentrations in the 4- and 7-foot bgs probes at ST-4MP, the 2-foot probe at ST-5MP, and the 2- and 7-foot bgs probes at ST-6MP.

The distribution of concentrations measured in the micro-purge samples from locations ST-2MP and ST-3MP was similar to the macro-purge samples, with concentrations generally increasing with depth and decreasing away from the slab. The results from probes at ST-1MP were anomalous, with the maximum concentrations measured at 4 feet bgs, and concentrations decreasing with depth from there. Figure 4-2 provides schematic isoconcentration contours for the south transect of micro-purge probes based on the mean TCE concentration in Table 4-3. The profile in this figure highlights the anomalous data from probe ST-1MP. These data indicate either a high (at 4 feet) secondary VOC source zone or that VOC concentrations from the ST1MP-7 and ST1MP-10 that were inconsistently low based on the models and groundwater concentration of TCE. Further investigation is warranted to determine the exact cause.

4.1.5 Tubing-type Cluster Samples

The tubing-type clusters consisted of six collocated probes installed at 6.25 feet bgs at locations ST-3 and ST-6. The tubing types installed was stainless steel, Nylaflow, PEEK, Teflon, copper, and polyethylene. The tubing-type clusters were sampled twice, on February 26 and 29, 2008. Tubing type clusters were sampled following the same procedures and with the same purge and sample volumes as the macro-purge probes. The results are summarized in Table 4-4.

4.1.6 Passive Diffusion Samplers

The PDSs are deionized-water filled VOA vials with trisodium phosphate (TSP) preservative and topped with a gas-permeable membrane cap. The PDSs were inserted into PDS wells and allowed to equilibrate with the surrounding soil gas for a minimum of 30 days. The first set of PDSs was inserted in the wells on February 13 and removed on March 18, 2008. The second set was inserted on April 7 and removed on May 13, 2008. The third set was inserted on May 13 and removed on June 13, 2008. The fourth set was inserted on June 13 and removed on July 23, 2008. The fifth set was inserted on July 23 and removed on August 26, 2008. The final set was inserted on August 26 and removed on October 1, 2008.

After removal of each PDS, the gas-permeable membrane cap was replaced with a standard VOA vial cap with a Teflon septum, and the vial was then submitted to AETL for analysis as a normal aqueous sample. The results were reported by AETL in units of $\mu g/L$ and are summarized in Table 4-5. In order to directly compare these results to the corresponding soil gas concentrations of collocated probes, the PDS results were converted to units of $\mu g/m^3$ assuming that the aqueous sample was in equilibrium with the soil gas at the probe location when the PDS was retrieved. Thus, the aqueous sample results in units of $\mu g/L$ were multiplied by 1,000 and the multiplied by Henry's Law constant, which is 0.421 for TCE and 0.752 for PCE (EPA 2008). Ground water temperatures ranged from between 17 to 30 degrees C at the site. Exact temperatures were not measured during the time of sampling so 25 degrees C was selected for the conversion temperature. Table 4-6 summarizes the PDS results for TCE and PCE converted to soil gas units of $\mu g/m^3$, and provides the mean soil gas concentration measured in samples from the collocated macro-purge soil gas probes.

Table 4-3 $TCE \ and \ PCE \ Concentrations \ in \ Micro-Purge \ Soil \ Gas \ Samples \ (\mu g/m^3)$ $IRP \ Site \ 14$ $NAS \ Lemoore, \ California$

Collection Date	26-Feb	-08	27-Feb	-08	28-Feb	-08	29-Feb	-08	Mean Cond	entration
Analyte	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE
Detection Limit	50	50	50	50	50	50	50	50		
Sample ID										
ST1MP-2	NS	NS	3,500	<250	9,200 E	400	NS	NS	6,350	400
ST1MP-4	43,000 E	1,200	19,000	340	20,000	310	NS	NS	27,333	617
ST1MP-7	NS	NS	6,500	<250	6,300	< 500	NS	NS	6,400	N/A
ST1MP-10	NS	NS	1,500	<250	120	ND	NS	NS	810	N/A
ST2MP-2	NS	NS	790	ND	500 C	ND	NS	NS	645	N/A
ST2MP-4	NS	NS	1,800	71	2,100	92	NS	NS	1,950	82
ST2MP-7	NS	NS	2,800	160	3,300	250	NS	NS	3,050	205
ST2MP-7 DUP	NS	NS	3,000	190	2,900	240	NS	NS	2,950	215
ST2MP-10	NS ¹	NS1	NS ¹	NS	NS1	NS1	NS	NS	NA	NA
ST3MP-2	NS	NS	110	ND	210	ND	NS	NS	160	N/A
ST3MP-4	NS	NS	ND	51	ND	ND	NS	NS	N/A	51
ST3MP-7	NS	NS	650	90	710	ND	NS	NS	680	90
ST3MP-10	NS	NS	2,000	ND	2,100 C	75	NS	NS	2,050	75
ST4MP-2	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST4MP-4	NS	NS	ND	ND	ND	ND	NS	NS	N/A	N/A
ST4MP-4 DUP	NS	NS	ND	ND	75	ND	NS	NS	75	N/A
ST4MP-7	NS	NS	ND	72	ND	ND	NS	NS	N/A	72
ST2MP-10	NS ¹	NS	NS ¹	NA¹	NA					
ST5MP-2	NS	NS	ND	51	NS	NS	ND	ND	N/A	51
ST5MP-4	NS	NS	* C	ND	NS	NS	* C	ND	N/A	N/A
ST5MP-7	NS	NS	ND	ND	NS	NS	* C	ND	N/A	N/A
ST2MP-10	NS	NSI	NS ¹	NS	NS	NS ¹	NS	NS	NA	NA ¹
ST6MP-2	NS	NS	ND	65	NS	NS	* C	ND	N/A	65
ST6MP-4	NS	NS	* C	ND	NS	NS	* C	ND	N/A	N/A
ST6MP-7	NS	NS	ND	52	NS	NS	ND	ND	N/A	52
ST6MP-10	NS	NS	* C	ND	NS	NS	* C	ND	N/A	N/A
ST6MP-10 DUP	NS	NS	* C	ND	NS	NS	ND	ND	N/A	N/A

Definitions:

- Plugged probe, no samples obtained.

C - coeultion
DL - detection limit
DUP - duplicate sample
E - estimated result

μg/m³ - micrograms per cubic meter

N/A - not applicable
NS - not sampled
ND - not detected
PCE - tetrachloroethene
TCE - trichloroethene

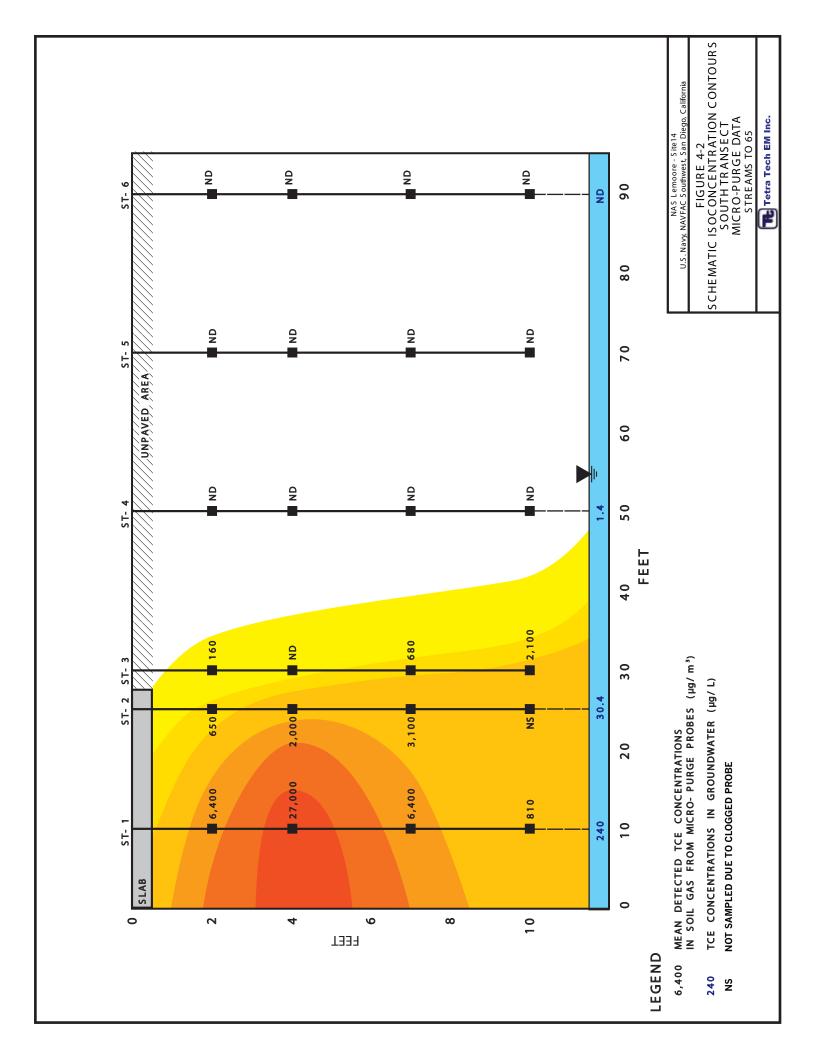


Table 4-4 TCE Concentrations in Tubing-Type Cluster Soil Gas Samples $(\mu g/m^3)$ IRP Site 14

NAS Lemoore, California

Probe ID	26-Feb-08	29-Feb-08
ST3-SS	460	350
ST3-NF	390	390
ST3-PK	460	340
ST3-TF	380	410
ST3-CU	ND	170
ST3-PL	310	310

Definitions:

CU

coppermicrograms per cubic meter $\mu \, g/m^3$

ND - not detected NF - Nylaflow PK - PEEK PL- polyethylene SS - stainless steel TCE - trichloroethene

TF - Teflon

Table 4-5
Summary of VOCs in Passive Diffusion Samplers (µg/L)
IRP Site 14
NAS Lemoore, California

Sample ID			ST1-2PDS	Sdc					ST1-4PDS	SOL					ST1-7PDS	SOc					ST1-10PDS	SOL		
Collection Date 18-Mar 13-May	18-Mar		13-Jun	Jul	26-Aug	1-0ct	18-Mar	18-Mar 13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	E	26-Aug	1-Oct
Analyte																								
PCE	ND	R	ND	ND	ND	ND	ND	ND	$0.510 \mathrm{J}$	ND	ND	ND	0.79 J	N	1.26	0.950 J	ND	0.790 J	0.99 J	ND	ND	ND	N N	ND
TCE	16.6	12.8	10.7	12.7	1.07	18.2	58.1	101	81.0	82.4	5.1	76.9	196	119	191	169	20.1	171	187	69.4	87.1	115	29.3	128
cis-1,2-DCE	ND	N	ND	ND	ND	ND	1.09	1.63	1.22	1.51	0.680 J	1.38	2.39	1.98	1.96	2.52	1.21	2.29	2.07	1.58	1.49	2.34	1.48	2.36
1,1-DCA	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	ND	0.570 J	0.580 J	ND	N	ND	ND	ND	0.510 J	N	.540 J
1.1-DCE	ND	R	ND	ND	ND	ND	ND	ND	0.540 J	ND	ND	ND	ND	N N	1.08	1.03	ND	N ON	ND	ND	0.780 J	0.930 J	R	.530 J
1,3-DCP	ND	ND	ND	R	ND	ND	ND	ND	Q.	ND	ND	R	ND	N N	R	R	ND	ND	ND	ND	R	Q	ND	ND
Chloroform	ND	ND	ND	QN	ND	ND	0.98 J	1.45	0.840 J	1.01	ND	0.990 J	1.97	1.32	1.36	4.	0.750 J	1.68	1.92	1.01	1.00	1.37	0.870 J	1.69
All other VOCs	ND	ND	ND	N	ND	ND	ND	ND	R	ND	ND	ND	ND	R	N Q	R	ND	ND	ND	ND	N Q	ND	ND	ND
Sample ID			ST2-2PDS	SOG					ST2-4PDS	PDS					ST2-7PDS	SQ					ST2-10PDS	PDS		
Collection Date ¹ 18-Mar 13-May	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct
Analyte																								
PCE	N	N N	ND	R	N	N	ND	ND	N N	N N	ND	QQ	ND	2	2	R	N	ND	ND	ND	Q Q	ND	ND	N
TCE	0.60 J	N	1.18	1.54	N	0.830 J	3.73	5.83	15.8	11.2	2.43	8.82	18.5	9.17	11.0	19.3	4.19	16.6	5.65	2.73	3.70	5.95	5.37	4.90
cis-1,2-DCE	ND	ND	ND	N	ND	ND	ND	ND	N	ND	ND	R	ND	N	R	N	ND	ND	ND	ND	R	ND	ND	ND
1,1-DCA	ND	ND	ND	N	ND	ND	ND	ND	N N	ND	ND	N	ND	ND	N	N	ND	ND	ND	ND	N	ND	ND	ND
1,1-DCE	ND	ND	ND	N	ND	ND	ND	ND	N N	ND	ND	N	ND	N	N	N	ND	ND	ND	ND	N	ND	ND	ND
1,3-DCP	ND	ND	ND	N	ND	ND	ND	ND	N	ND	ND	N	ND	N N	R	N	ND	ND	ND	ND	N	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	0.950 J	1.16	4.	2.50	1.69	1.28	2.61	2.32	1.47	1.41	1.79	1.42	2.57	1.06	ND	0.520 J	0.670 J	0.730 J	.730 J
All other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sample ID			ST3-2PDS	SOG					ST3-4PDS	PDS					ST3-7PDS	SOG					ST3-10PDS	PDS		
Collection Date ¹ 18-Mar 13-May	18-Mar		13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct
Analyte PCF	S	S	S	E	S	Z	S	S	S	S	S	E	S	S	E	S	S	S S	S	S	Ę	S S	S S	S
TCE	5	5	E E		E	1	5	2	2	2	2	1	1 00 0		2	E	1 40	2	Ξ	801	38	1 40	0 660 I	5
cis-12-DCE	E E	2 5	2 2	2 8	2 2	2 2	2 2	E E	2 2	2 2	2 2	2 2	. E	2 2	2 2	2 8	Ē	2 2	E	E E	£	Ē		2 2
1,1-DCA	Q.	2	R	N ON	Q.	2	Q.	Q.	2	Q.	R	R	Q.	2	2	2	2	Q.	Q.	R	2	R	2	N ON
1,1-DCE	ND	Q.	ND	ND	ND	ND	ND	ND	N N	ND	ND	N N	ND	N Q	N N	N N	ND	ND	ND	ND	N	ND	ND	ND
1,3-DCP	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	1.37	ND	ND	ND	N	ND	ND	ND	ND	N	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	$0.58 \mathrm{J}$	N N	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND
All other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	R	ND	NO Pl	ND	ND	ND	ND	ND	ND	ND	ND

Table 4-5
Summary of VOCs in Passive Diffusion Samplers (µg/L)
IRP Site 14
NAS Lemoore, California

Somulo ID			ST5_2PDS	30					ST5_APDS	pne					ST5_7PDS	pne					STS-10PDS	pne		
Collection Date 18-Mar 13-May	18-Mar		13-Jun	Ξ	26-Aug	1-0ct	18-Mar 13-N	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar 13-May	13-May	13-Jun	Ξ	26-Aug	1-0ct
Analyte					D						0						0			,			D	
PCE	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCE	ND	R	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	N	QN	N	ND	ND	ND	ND	N	ND	ND	ND
cis-1,2-DCE	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	N N	N N	ND	ND	ND	ND	N N	ND	ND	ND
1,1-DCA	ND	N N	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	N	N	N N	ND	ND	ND	ND	N N	ND	ND	ND
1,1-DCE	ND	N N	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	N	N	N N	ND	ND	ND	ND	N N	ND	ND	ND
1,3-DCP	ND	N N	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	N N	N N	R	ND	ND	ND	ND	QN.	ND	ND	ND
Chloroform	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	N	N	ND	ND	ND	ND	N	ND	ND	ND
All other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
																								ĺ
Sample ID			NT5-2PDS	DS_2					NT5-4PDS ²	PDS2					NT5-6PDS ²	PDS^2					NT5-8PDS ²	DS_2		
Collection Date 18-Mar 13-May	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct
Analyte	CIN CIN	E	E	E	CIA	CIN	CEX	CIA	Ę	Ę	E	Ę	E	Ę	Ę	Ę	EX	E	Ę	E	Ę	E	Ę	Ę
PCE	a i	2 5	a d	S S	a i	a d	ON A	S S	S S	a d	a d	N F	DN G	N E	N A	N E	a g	a f	a d	ON E	a f	d e	ON E	d i
ICE	N I	2	N I	Q !	Q .	N.	QN .	a l	N I	Q.	N I	Q	ON.	2	ON.	2	ON.	Q .	ON.	ND.	2	N I	ND.	QN !
cis-1,2-DCE	N	R	R	ND	N N	R	ND	N	R	N	N	R	ND	2	Q.	2	ND	N	ND	ND	2	ND	ND	ND
1,1-DCA	ND	R	ND	ND	ND	ND	ND	ND	R	ND	ND	R	ND	N N	QN Q	R	ND	ND	ND	ND	Q.	ND	ND	ND
1,1-DCE	ND	N	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	N	ND	N	ND	ND	ND	ND	N	ND	ND	ND
1,3-DCP	ND	R	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	N	N Q	R	ND	ND	ND	ND	N	ND	ND	ND
Chloroform	ND	R	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	N	QN.	N	ND	ND	0.71 J	ND	ND	ND	0.60 J	ND
All other VOCs	ND	Q.	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	N N	Q.	N N	ND	ND	ND	ND	Q.	ND	ND	ND
Sample ID			$NT6-2PDS^{2}$	DS_2					NT6-4PDS ²	PDS^2					SQL9-9LN	PDS^2					NT6-8PDS	DS_2		
on Date ¹	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-0ct	18-Mar	13-May	13-Jun	23-Jul	26-Aug	1-Oct
Analyte																								
PCE	ND	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	Q.	ND	R	Q.	R	ND	ND	ND	ND	R	ND	ND	ND
TCE	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	N	ND	N	ND	ND	ND	ND	N	ND	ND	ND
cis-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCA	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	N N	N N	ND	ND	ND	ND	N N	ND	ND	ND
1,1-DCE	ND	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	N N	QN Q	R	ND	ND	ND	ND	N N	ND	ND	ND
1,3-DCP	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	N	QN	ND	ND	0.910 J	ND	ND	ND	ND	N	ND
All other VOCs	ND	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	N	ND	ND	N	ND	ND	ND	ND	ND	N	ND	ND	ND

Table 4-5 Summary of VOCs in Passive Diffusion Samplers (µg/L) IRP Site 14

NAS Lemoore, California

Data Validity Qualifier:

J - Indicates analyte was detected; however, analyte concentration is an estimated value which is between the MDL and the PQL.

- not detected; result is less than the MDL

Definitions:

DCA - dichlorocethane
DCB - dichlorocethane
DCP - dichloropopane
pg/L - micrograms prairer
MDL - micrograms prairer
MDL - mortograms prairer
MDL - mortograms prairer
PDS - parsive diffrasion sampler
POS - parsive diffrasion sampler
PCE - tetrachlorocethene
TCE - trichlorocethene
TCE - trichlorocethene

Notes:

Samples from locations NT-5 and NT-6 in the abandoned transect at former Building 173. These locations do not correspond to
the north transect locations adjacent to Building 170 for which active soil gas sample data are presented in Table 4.2.
 Date the sampler was removed from the PDS well. PDSs were placed in the wells for a minimum of 30 days prior to removal.

Concentrations Converted to Soil Gas Units¹ (µg/m³) TCE and PCE in Passive Diffusion Samplers NAS Lemoore, California IRP Site 14 **Table 4-6**

Analyte					TCE							PCE			
Sampling Method	Method			PDS			Mean	Mean			PDS			Mean	Mean
Collection Date	Date .	18-Mar	13-May	13-Jun	23-Jul	26-Aug	PDS	Macropurge ²	18-Mar	13-May	13-Jun	23-Jul	26-Aug	PDS	Macropurge ²
Equilibration (days) Detection I imit	Ion (days) f imit	4 1.	8 <u>1</u>	31 717	}	ş <u>:</u>	111	9	\$ £	00 775	16 728	€ 7. 7.	4 7 X	375	9
Sample	Sample	117	117	117	117	117	1177	3							3
Location	Depth														
ST-1	2	6,989	5,389	4,505	5,347	450	4,536	6,500	ND	ND	ND	ND	ND	ND	88
ST-1	4	24,460	42,521	34,101	34,690	2,147	27,584	16,000	NO	ND	384	ND	ND	384	300
ST-1		82,516	50,099	67,781	71,149	8,462	56,001	20,000	594	ND	948	714	ND	752	285
ST-1	10	78,727	29,217	36,669	48,415	12,335	41,073	25,000	744	ND	ND	ND	ND	744	385
ST-2	2	253	ND	497	648	ND	466	190	ND	ND	ND	ND	ND	N	ND
ST-2	4	1,570	2,454	6,652	4715	1,023	3,283	550	ND	ND	N ON	ND	ND	N	ND
ST-2	7	7,789	3,861	4,631	8125	1,764	5,234	2,000	ND	ND	ND	ND	ND	ND	75
ST-2	10	2,379	1,149	1,558	2505	2,261	1,970	1,900	ND	ND	ND	ND	ND	ND	06
ST-3	2	ND	N N	N Q N	ND	N Q	ND	ND	ND	ND	ND	ND	N	ND	ND
ST-3	4	ND	ND	ND	ND	ND	ND	73	ND	ND	ND	ND	ND	ND	ND
ST-3	7	379	ND	ND	ND	627	503	440	ND	ND	ND	ND	ND	ND	ND
ST-3	10	467	455	581	627	278	482	1,500	ND	ND	ND	ND	ND	ND	ND
ST-5	2	ND	NON	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ST-5	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ST-5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
ST-5	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Definitions:															

- micrograms per liter

- micrograms per cubic meter

- not applicable

- not detected

- passive diffusion sampler

- practical quantitation limit µg/m³ N/A ND PDS PQL PCE TCE

- tetrachloroethene

- trichloroethene

- Laboratory results reported in aqueous units of $\mu g/L$ (Table 4-5) multiplied by 1,000 for aqueus units of $\mu g/m^3$, multiplied by Henry's constant (0.421 for TCE & 0.751 for PCE) Note:

- Mean concentration measured in collocated macropurge probe, 26 February to 29 February 2008 (Table 4-2)

4.2 DISCUSSION

4.2.1 Distribution of VOCs in the Subsurface

The distribution of TCE along the primary (south) transect, based on the mean macro-purge sample concentrations, is depicted in Figure 4-1. The data indicate that, as expected, the concentrations decrease with increasing distance from the groundwater source. This finding is consistent with the physical principles of subsurface vapor diffusion from a groundwater source. The data also indicate that concentrations decrease moving horizontally out from underneath and away from the slab. This finding is consistent with the physical effect of the slab in trapping soil vapor and preventing it from moving vertically upward to the atmosphere.

The isoconcentration contours and concentration trends shown in Figure 4-1 are generally consistent with those predicted by numerical models (Abreu and Johnson 2005). However, the isoconcentration contours in the vadose zone beneath the edge of the slab are steeper than those that would be predicted assuming a uniform groundwater concentration. Results for discrete groundwater samples from the top of the water table (Figure 4-1, Table 4-1) confirmed that groundwater concentrations are not uniform, but decrease with increasing horizontal distance away from the slab. IRP Site 14 groundwater data for monitoring wells in the vicinity of the study area suggest that groundwater concentrations are higher in the deeper parts of the aquifer; thus, there may also be a groundwater concentration gradient with depth.

Another point of interest is the concentration of VOCs at the groundwater/soil gas interface and consistency of those results with Henry's Law. The measured soil gas concentration closest to the groundwater at each of the probe locations was approximately 20 percent of the predicted equilibrium soil gas concentration calculated from the groundwater concentration using the Henry's Law constant. This finding indicates that there is a gradient across the soil gas/groundwater interface that is driving VOCs from the groundwater into the soil gas phase.

Overall, the soil gas concentration profile shown in Figure 4-1 reflects a strong mass transfer of VOCs out from underneath the slab and upward toward the uncovered ground surface. The mass transfer is facilitated by concentration gradients, which exist in the soil gas, at the soil gas/groundwater interface, in the groundwater. Collectively, these results demonstrate that soil gas and groundwater concentrations in the vicinity of the slab are not in a state of static equilibrium but reflect a dynamic equilibrium associated with a mass transfer effect.

4.2.2 Macro-Purge versus Micro-Purge Sampling

Paired macro-purge and micro-purge samples were collected on February 27 and 28, 2008 from 24 soil gas sampling probes (12 macro-purge probes and 12 micro-purge probes). When collecting paired samples, the micro-purge sample was always collected first, followed by the collocated macro-purge sample within 5 minutes. The rationale was that the volume of soil gas removed from the micro-purge probes was trivial (less than 5 ml) in relation to the volume removed from the macro-purge probes (~30 to 60 ml); therefore, it was assumed that purging and sampling the micro-purge probes was unlikely to effect the results obtained from the macro-purge probes, whereas the reverse might not be true.

The paired micro-purge and macro-purge results for TCE are summarized in Table 4-7 and the data are plotted on Figure 4-3. For the purposes of statistical testing, it was assumed that each data point is independent, even though each soil vapor sampling point was sampled on two different days and there were four soil vapor sampling points in each borehole. This is a reasonable assumption to make as soil vapor migrates relatively quickly and the probe locations were separated by a minimum of 2 feet; therefore, subsequent samples are not likely to be sampling the same material. To compare the results of

the two methods, a matched pairs t-test was used on the pooled data, excluding any pairs that had a non-detect. In order to meet the assumptions of normality, all data were natural logarithm transformed. The results of the analyses indicate that the means of the macro-purge and micro-purge data do not differ from each other when pooled across both sampling events and sampling locations. The following statistical parameters were obtained through this analysis:

- Degrees of freedom (df) = 18
- t-value (t) = 0.22
- Probability (p) = 0.8.

Graphs comparing the means for each of the two sampling methods are shown in Figure 4-4.

The RPDs between paired micro-purge and macro-purge samples ranged from 122 to -198 percent ("negative" RPDs indicate micro-purge results below the paired macro-purge result). However, excluding the results from location ST-1 at 10 feet bgs, which are clearly anomalous for the micro-probe samplers, the RPDs range from 122 to -105 percent. If the value from ST1-10 is excluded and considered an outlier, the maximum difference between the two methods was a factor of 4.1, with an average of 2.2 (Table 4-7). The concentrations measured in micro-purge probes were typically higher than the macro-purge concentrations (14 of 19 measurements).

Table 4-7 also summarizes the RPDs between like samples collected on February 27 and 28 (i.e., the RPD between the two macro-purge sample results collected from the same probe). The RPDs between macro-purge sample results obtained on consecutive days ranged from 0 to 33 percent. This variability can be largely explained as normal analytical error, which is typically considered to be ± 25 percent. The RPDs between micro-purge sample results ranged from 3 to 170 percent. This variability is much greater than can be explained as analytical error, and indicates that one or more element of the micro-purge probes or the micro-purge sampling technique introduces a significant variability to the sample results.

Summary of TCE Concentrations in Paired Macro-purge and Micro-purge Samples $(\mu g/m^3)$ IRP Site 14 NAS Lemoore, California **Table 4-7**

Probe Depth Macro Micro Factor Macro Micro Factor RPD Factor Macro Micro Probe Prob Prob Prob Prob Prob Pro				27-Feb	eb			28-Feb	de ⁷ eb		RPD Between	Like Samples ¹
2 5,900 3,500 51% 1.7 7,000 9,200 -27% 1.3 4 14,000 19,000 -30% 1.4 10,000 50,000 -67% 2.0 7 21,000 6,500 105% 3.2 18,000 6,300 96% 2.9 7 21,000 1,500 176% 15.3 26,000 120 198% 216.7 2 210 790 -116% 3.8 170 500 -99% 2.9 2.9 4.1 510 1,700 2,800 -33% 1.4 2,000 3,300 -49% 1.7 7 2,000 2,800 -55% 1.8 1,700 2,900 -52% 1.7 7 2,000 110 NA NA NA ND 210 NA NA NA ND 210 NA NA NA 62 ND NA NA NA 62 ND NA NA NA 62 ND NA	Probe	Depth	Macro	Micro	RPD	Factor	Macro	Micro	RPD	Factor	Macro	Micro
4 14,000 19,000 -30% 1.4 10,000 20,000 -67% 2.0 7 21,000 6,500 105% 3.2 18,000 6,300 96% 2.9 10 23,000 1,500 176% 15.3 26,000 120 198% 216.7 2 210 790 -116% 3.8 170 500 -99% 2.9 7 2,000 2,800 -33% 1.4 2,000 3,300 -49% 1.7 7 2,000 2,800 -55% 1.8 1,700 2,900 -52% 1.7 2 ND 110 NA NA NA ND 210 NA NA NA ND 210 NA NA NA NA 10 1,500 2,000 -29% 1.3 NS NA	ST-1	2	5,900	3,500	51%	1.7	7,000	9,200	-27%	1.3	-17%	%06-
7 21,000 6,500 105% 3.2 18,000 6,300 96% 2.9 10 23,000 1,500 176% 15.3 26,000 120 198% 216.7 2 210 790 -116% 3.8 170 50 -99% 2.9 4 590 1,800 -101% 3.1 510 2,100 -122% 4.1 7 2,000 2,800 -33% 1.4 2,000 3,300 -49% 1.7 7 2,000 2,800 -55% 1.8 1,700 2,900 -52% 1.7 7 ND NA NA NA NA NA NA NA 8 ND NA NA NA NA NA NA NA 10 1,500 2,000 -29% 1.5 NA NA NA NA 4 ND NA NA NA NA NA NA NA	ST-1	4	14,000	19,000	-30%	1.4	10,000	20,000	%29-	2.0	33%	-5%
10 23,000 1,500 176% 15.3 26,000 120 198% 216.7 2 210 790 -116% 3.8 170 500 -99% 2.9 4 590 1,800 -101% 3.1 510 2,100 -122% 4.1 7 2,000 2,800 -33% 1.4 2,000 3300 -49% 1.7 7 2,000 2,800 -55% 1.8 1,700 2,900 -52% 1.7 2 ND 110 NA NA NA NA NA NA 4 83 ND NA NA NA NA NA NA 10 1,500 2,000 -29% 1.5 450 710 -45% 1.6 4 ND ND NA NA NA NA NA NA NA	ST-1	7	21,000	6,500	105%	3.2	18,000	6,300	%96	2.9	15%	3%
2 210 790 -116% 3.8 170 500 -99% 2.9 4 590 1,800 -101% 3.1 510 2,100 -122% 4.1 7 2,000 2,800 -33% 1.4 2,000 3,300 -49% 1.7 7 (D) 1,700 3,000 -55% 1.8 1,700 2,900 -52% 1.7 2 ND 110 NA NA NA 62 ND NA NA 62 ND NA NA 1.6 7 430 650 -41% 1.5 450 710 -45% 1.6 10 1,500 2,000 -29% 1.3 NS NA NA NA 1.4 4 ND NA	ST-1	10	23,000	1,500	176%	15.3	26,000	120	198%	216.7	-12%	170%
4 590 1,800 -101% 3.1 510 2,100 -122% 4.1 7 2,000 2,800 -33% 1.4 2,000 3,300 -49% 1.7 7 (D) 1,700 3,000 -55% 1.8 1,700 2,900 -52% 1.7 2 ND 110 NA NA ND 210 NA NA NA 62 ND NA NA NA 10 1,50 650 -41% 1.5 450 710 -45% 1.6 1.6 1,500 2,000 -29% 1.3 NS NA	ST-2	2	210	790	-116%	3.8	170	200	%66-	2.9	21%	45%
7 2,000 2,800 -33% 1.4 2,000 3,300 -49% 1.7 7(D) 1,700 3,000 -55% 1.8 1,700 2,900 -52% 1.7 7 2 ND 110 NA NA RO 62 ND NA NA 62 ND NA NA 1.5 450 710 -45% 1.6 1.6 1,500 2,000 -29% 1.3 NS NA	ST-2	4	590	1,800	-101%	3.1	510	2,100	-122%	4.1	15%	-15%
7(D) 1,700 3,000 -55% 1.8 1,700 2,900 -52% 1.7 2 ND 110 NA NA NA NA NA NA 4 83 ND NA NA 62 ND NA NA NA 7 430 650 -41% 1.5 450 710 -45% 1.6 10 1,500 2,000 -29% 1.3 NS NA NA NA 4 ND ND NA NA NA NA NA NA	ST-2	7	2,000	2,800	-33%	1.4	2,000	3,300	-49%	1.7	%0	-16%
2 ND 110 NA NA ND 210 NA NA NA NA 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ST-2	7(D)	1,700	3,000	-55%	1.8	1,700	2,900	-52%	1.7	%0	3%
4 83 ND NA NA 62 ND NA NA NA 77 430 650 -41% 1.5 450 710 -45% 1.6 1.6 1,500 2,000 -29% 1.3 NS NS NA NA NA ND NA	ST-3	2	ND	110	NA	NA	ND	210	NA	NA	NA	-63%
7 430 650 -41% 1.5 450 710 -45% 1.6 10 1,500 2,000 -29% 1.3 NS NS NA	ST-3	4	83	ND	NA	NA	62	ND	NA	NA	29%	NA
10 1,500 2,000 -29% 1.3 NS NS NA	ST-3	7	430	650	-41%	1.5	450	710	-45%	1.6	-5%	%6-
4 ND ND NA NA ND 75 NA NA NA	ST-3	10	1,500	2,000	-29%	1.3	NS	NS	NA	NA	NA	NA
	ST-4	4	ND	ND	NA	NA	ND	75	NA	NA	NA	NA

Average Factor²: 2.2

Definitions:

RPD - relative percent difference

μg/m³ - micrograms per cubic meter
NA - not applicable
ND - not detected
NS - not sampled

not detectednot sampled

Note: 1 2

- RPD between the concentrations measured on 2/27 and 2/28/2008 at the same probe
- Average of all factors excluding the two measurements from ST-1 at 10 feet

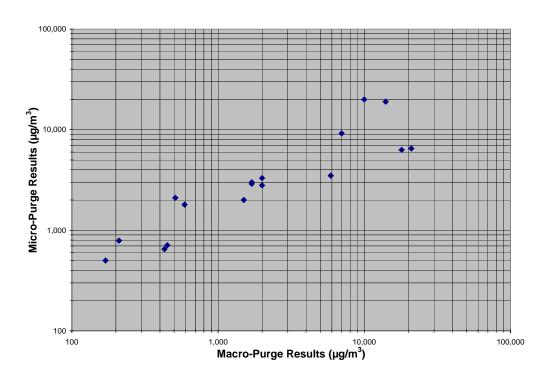


Figure 4-3. Plot of Macro-Purge versus Micro-Purge Results (NDs and results from location ST-1 at 10 feet bgs excluded)

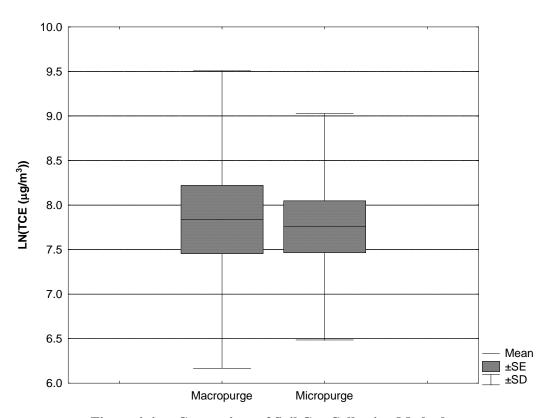


Figure 4-4. Comparison of Soil Gas Collection Methods

The same data set (with NDs and results from ST1-10 excluded) was also used in a linear regression to determine whether the results of one method could be used to predict the results of the other. The following statistical parameters were obtained through this analysis:

- df = 15
- $R^2 = 0.8205$
- p < 0.0001.

When the non-detect results and the anomalous data from ST-1 at 10 feet bgs are excluded, the regression is significant with p = 0.0000006 (Figure 4-5). As the results were found to be significantly related, the macro-purge results could be used to predict the micro-purge results, and vice versa. The results of the regressions are shown in Figure 4-5. The equation provided by the regression is as follows:

 $Ln(micro-purge) = Ln(macro-purge) \times 0.64 + 3.1$

If the two methods were identical, a slope of 1 and an intercept of zero would be expected; however, a non-zero Y-intercept (3.1) and a slope less than 1 (0.64) indicate that there are differences between the methods. The non-zero Y-intercept implies that with non-detect results from the macro-purge probes, one would still get positive results from the micro-purge probes. Further review of the equation indicates that while at low concentrations ($< \sim 5,500 \,\mu\text{g/m}3$) the micro-purge results are predicted to be higher than the macro-purge results (as observed in the sample results), at higher concentration, the macro-purge results are predicted to be higher than the micro-purge results. This prediction could be easily tested at a site with higher VOC concentrations.

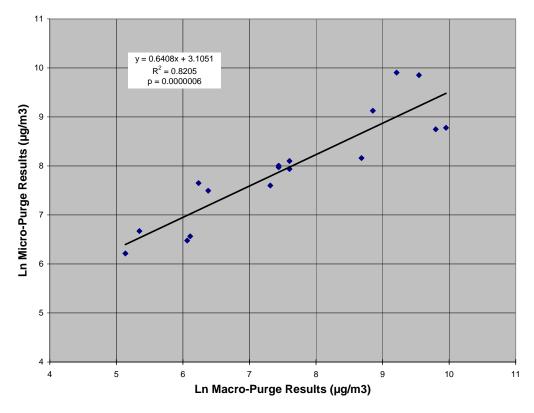


Figure 4-5. Linear Regression Plot of Natural Logarithm Transformed Macro-purge vs. Micro-purge Collection Methods (Non-detects and results from ST-1 at 10 feet excluded)

To summarize, the statistical analyses indicate there is a correlation between the results obtained from the two sampling methodologies; however, the range of RPDs for the macro-purge samples was 33 percent, which is largely within analytical error, whereas the range of RPDs for the micro-purge samples was 170 percent, suggesting there are some as yet undetermined issues with this sampling method that are limiting its reproducibility. Ignoring the samples from location ST-1 at 10 feet bgs, the paired results agreed within a factor of 4.1, with an average factor of 2.2, and the linear regression was significant with p = 0.0000006.

The paired micro-purge and macro-purge probes were installed at the same depths but due to drilling equipment constraints are separated laterally by approximately 1 foot. Therefore, the differences observed between paired micro-purge and macro-purge sample results could be, at least in part, attributed to heterogeneities in actual soil gas concentrations over short distances in the subsurface. The significant variability in micro-purge results obtained from the same probe over two days suggest that the discrepancy between micro-purge and macro-purge results is more like due to issues with this sampling method for the micro-purge probes. Further experiments with the probe construction methodology and sampling technique are warranted to better understand the results.

4.2.3 Evaluation of Tubing Types

The tubing type clusters were sampled on February 26 and 29, 2008. With the exception of copper, the different tubing types yielded similar TCE concentrations, ranging from 310 to 460 $\mu g/m^3$, with polyethylene yielding the lowest concentrations on both sampling events at ST-3 (Table 4-4). The mean and median of this range is 385 $\mu g/m^3$. If one assumes a typical analytical error of ± 20 percent, then all of these concentrations fall within analytical error of the mean and median. However, copper yielded significantly lower concentrations, with one sample containing no detectable TCE and the second containing only 170 $\mu g/m^3$. The reasons for these inconsistent and lower values are not clear.

A notable observation from the tubing type sampling is that there are no significant differences between results obtained from the Nylaflow tubing versus those obtained from the stainless steel tubing. This is important as it indicates that differences observed between the macro-purge and micro-purge sampling results discussed in Section 4.2.1 are unlikely to be due to the fact that the macro-purge probes were constructed with Nylaflow tubing while the micro-purge probes were constructed with stainless steel tubing.

4.2.4 Passive Diffusion Samples

Table 4-6 summarizes the TCE and PCE results from the six sets of PDSs along with the corresponding mean TCE and PCE concentrations from the macro- and micro-purge soil gas probes. In Table 4-6, the PDS results are soil gas concentrations calculated from the measured water concentrations for the PDSs multiplied by the Henry's Law constant. The calculated TCE concentrations in the PDSs were generally higher than the corresponding measured soil gas sample concentrations, although the samples from location ST-3 are an exception. The same observation is also apparent for PCE. This is a puzzling result, as it is difficult to propose a mechanism that could lead to PDS concentrations exceeding equilibrium concentrations. Perhaps the differences in soil gas concentrations between the PDSs and active soil gas samples are due to the spatial separation of the probes or variations in soil gas concentrations over time. Additional data are required to resolve this discrepancy.

It should be noted that the detection limit for the active soil gas samples (50 μ g/m³) is significantly lower than for the PDSs (0.5 μ g/L, which converts to 211 μ g/m³ for TCE and 376 μ g/m³ for PCE); therefore, for many of the low concentration probe locations, the active soil gas samples yielded positive results while the PDS results were non-detect.

5.0 CONCLUSIONS

The two primary goals of this investigation were to (1) evaluate the distribution of VOCs in the vadose zone to improve the understanding of mechanisms of vapor migration and intrusion, and (2) develop a robust database of paired micro-purge and macro-purge soil gas measurements with which to assess the comparability of the two methods. Secondary objectives were to (1) assess the effect of tubing type on soil gas sample results, and (2) assess the performance of the PDS in relation to active soil gas sampling results. Conclusions relating to each of these objectives are listed under separate headings below.

Distribution of VOCs in the Vadose Zone

At the NAS Lemoore site studied, the following observations were made with respect to the distribution of VOCs in the sub-slab/near-slab environment:

- The vertical and horizontal distribution of VOCs in soil gas was generally consistent with known physical principles and the predictions of numerical models. VOC concentrations decreased with distance away from the slab and with distance above the groundwater table. However, the isoconcentration contours near the edge of the slab were surprisingly steep.
- Although only a limited number of groundwater samples were taken at the surface of the water table, VOC concentrations in groundwater also decreased with distance away from the slab. Thus, there appears to be a strong gradient in groundwater concentrations that parallels the gradient in soil gas concentration.
- Although soil gas concentrations exhibited a strong gradient in the immediate vicinity of the slab, repeated measurements over several days indicated that the results were reproducible. Thus, the gradients do not appear to be the result of a short-term temporal effect.
- Soil gas concentrations near the water table were approximately 20 percent of the equilibrium soil gas concentrations predicted from Henry's Law constants, indicating that there is a gradient across the soil gas/groundwater interface.

In summary, soil gas and groundwater concentrations in the near-slab environment appear to be in a dynamic equilibrium. Strong gradients exist to facilitate the mass transfer of VOCs out from underneath the slab and upward toward the uncovered soil surface. Modeling this environment and making predictions regarding soil gas concentrations are challenging tasks.

The sharp gradients in soil gas VOC concentrations near the slab edge have important implications for the use of near-slab soil gas samples in vapor intrusion investigations. The results of this investigation indicate that near-slab soil gas samples collected only a few feet from the edge of the slab may underestimate the concentrations present beneath the slab. Further research is warranted to evaluate whether the near-slab vapor profile observed at NAS Lemoore IRP Site 14 is typical.

Macro-purge versus Micro-Purge

- Comparison of the TCE soil gas concentrations from the micro-purge and macro-purge methods showed a maximum difference of a factor of 4 with an average difference of 2.2.
- The statistical analyses indicate there is a correlation between the results obtained from the two sampling methodologies; however, the range of RPDs for the macro-purge samples was 50 percent, which is largely within analytical error, whereas the range of RPDs for the micro-purge

samples was 260 percent, suggesting there are some as yet undetermined issues with this sampling method that are limiting its reproducibility.

Tubing Types

- Soil gas probes constructed with stainless steel, Nylaflow, PEEK, polyethylene, and Teflon all
 yielded results within analytical error of each other, although polyethylene appears to yield
 somewhat lower concentrations. Soil gas probes constructed with copper tubing yielded
 significantly lower concentrations.
- The results indicate that stainless steel, Nylaflow, PEEK, and Teflon tubing are all suitable materials for probe construction, but polyethylene tubing should be avoided and copper tubing is not suitable for soil gas probe construction.

Passive Diffusion Sampler

• Soil gas equivalent TCE concentration results for the PDSs were generally higher than the corresponding active soil gas sample concentrations. Additional data is needed to more completely assess the performance of the PDS.

6.0 RECOMMENDATIONS

The results of this investigation have raised a number of questions that warrant further experimentation. The following recommendations are provided for future research.

- Further evaluation of the micro-purge sampling technique is warranted to understand the source of the variability observed in results obtained through this method. It is unclear whether the variability is due to the probe construction method or the sampling technique. One approach to evaluating this is to collect paired soil gas samples from micro-purge and macro-purge probes, but collect samples from the micro-purge probes using the same parameters as are used at the macro-purge probes. That is, use the same purge volume (measured in ml, not system volumes), purge rate, and sample volume. If the variability is a function of sampling technique, then it would be expected to be similar between the two probe types if when they are sampled in the same manner, whereas, if the variability is due to the construction methodology, the varying the sample collection parameters would not be expected to impact the results.
- At the NAS Lemoore site studied, additional groundwater sampling, possibly at multiple discrete depths, combined with contemporaneous soil gas sampling may provide improved understanding of the dynamic relationship between groundwater and soil gas, and the influence of the slab.
- Installation of additional soil gas and groundwater sampling locations at the NAS Lemoore site studied both under the slab and in the unpaved area immediately adjacent to the slab, would help refine the assessment of the vertical and lateral distribution of VOCs in the subsurface.
- The steepness of the soil gas isoconcentration contours in the vicinity of the slab at NAS Lemoore IRP Site 14 was a somewhat surprising result. Measurement of the soil gas concentration profiles in the sub-slab/near-slab environment at other sites is needed to confirm whether this result is typical.

7.0 REFERENCES

- Abreu, Lilian D. and Paul D. Johnson. 2005. Effect of Vapor Source Building Separation and Building Construction on Soil Vapor Intrusion as Studied with a 3-Dimensional Model. Envir. Sci. Technol., 39, 4550-4561.
- California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC). 2003. *Advisory Active Soil Gas Investigations*. January.
- Tetra Tech EM, Inc. (Tetra Tech). 2008. Quality Assurance Project Plan for the Investigation of the Vertical Distribution of VOCs in soils from the Groundwater to the Surface/Subslab. January.
- U.S. Environmental Protection Agency (EPA). 2007. Final Project Report for the Development of an Active Soil Gas Sampling Method. Office of Research and Development, National Exposure Research Laboratory, Las Vegas, NV. EPA/600/R-07/076.
- EPA. 2008. *EPA On-line Tools for Site Assessment Calculation, Estimated Henry's Law Constants*. Available on-line at http://www.epa.gov/athensr/learn2model/part-two/onsite/esthenry.htm.
- EPA. 1997. Method 8260B Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS). Test Methods for Evaluating Solid Waste (SW-846). Office of Solid Waste, U.S. Environmental Protection Agency, Washington, D.C.
- EPA. 1996. Method 5035A Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples. Test Methods for Evaluating Solid Waste (SW-846). Office of Solid Waste, U.S. Environmental Protection Agency, Washington, D.C.
- EPA. 1996. Method 8021B Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors. Test Methods for Evaluating Solid Waste (SW-846). Office of Solid Waste, U.S. Environmental Protection Agency, Washington, D.C.

APPENDIX A SAMPLING TRIP REPORT

SAMPLING TRIP REPORT

for

Vertical Distribution of VOCs in Soils from Ground Water to the Surface/Subslab

Prepared by:

Tetra Tech EM, Inc. 1230 Columbia Street Suite 1000 San Diego, CA 92101

EPA Contract #EP-C-05-061 Task Order No. 65

May 2008

Prepared for:

Brian A. Schumacher, Task Order Project Officer National Exposure Research Laboratory Office of Research and Development U.S. Environmental Protection Agency Las Vegas, NV 89114





1.0 INTRODUCTION

This Trip Report provides a summary of the sampling activities that were conducted between January 14 and March 3, 2008 at Naval Air Station (NAS) Lemoore Installation Restoration Program (IRP) Site 14. The sampling was conducted on behalf of the U.S. Environmental Protection Agency (EPA), Office of Research and Development, in support of the project titled *Vertical Distribution of VOCs in Soils from Ground Water to the Surface/Subslab*, conducted under EPA Contract Number EP-C-05-061, Task Order Number 65 (TO-65).

NAS Lemoore is located in the California Central Valley, approximately 40 miles south of Fresno and 180 miles northwest of Los Angeles. IRP Site 14 is located in the operations area of NAS Lemoore and consists of maintenance buildings, hangars, and aircraft parking areas (Figure 1).

The project field team included environmental consultants from Tetra Tech (Chris Crosby, Michele Mykris, Brian Dow, Logan Hackett, and James Elliot) and H&P Mobile Geochemistry (Blayne Hartman, Dave Balkenbush, Mark Burke, Kurt Schindler), and drill rig operators from Interphase Environmental, Inc. (Gilbert Mendoza and Raul Talavera). In addition to contractor personnel, the project field team included the EPA Task Order Project Officer (Brian Schumacher) and EPA scientists (John Zimmerman and Katrina Varner). Mr. Frank Nielson, from the NAS Lemoore environmental office, provided logistical support and was often on-site.

The field investigation was implemented over six mobilizations. Geophysical clearance of proposed sampling locations and concrete coring at the Building 173 slab were conducted on January 9 and 10. Drilling and soil gas probe installation were conducted during the weeks of January 14, January 21, and February 11. Soil gas sampling with on-site analysis was conducted the week of February 25. Installation of the HOBO weather station was completed on March 3.

2.0 DRILLING AND PROBE INSTALLATION

Soil gas probe installation and soil sampling was conducted in accordance with the procedures detailed in the QAPP (Tetra Tech 2007). Groundwater sampling, which was not proposed in the QAPP, was conducted at a subset of the sampling locations to obtain data on groundwater VOC concentrations immediately below the soil-gas and soil sampling locations. Groundwater samples were collected by temporarily installing 1-inch diameter slotted PVC well screen in the open boreholes, allowing groundwater to flow into the screen until the groundwater level had stabilized, and then collecting a grab sample with a bailer.

2.1.1 Week of January 14

During the week of January 14, 2008, soil and groundwater sampling and macro-purge soil gas probe installation were conducted at the transects proposed in the QAPP at the former Building 173 (jet-engine test-cell) slab (Figure 2). Drilling, probe installation, and soil sampling was conducted at all 12 of the locations proposed in the QAPP. Grab groundwater samples were collected at six of the drilling locations. Soil sampling and soil gas probe installation was conducted at 2, 4, 6, and 8 feet below ground surface (bgs) at each location. In addition, sub-slab soil gas probes were installed at the four locations on the former Building 173 slab, and tubing-type clusters were installed at two locations.

EPA installed micro-purge soil gas sampling probes at the six transect locations and installed Passive Diffusion Sampler (PDS) wells at two locations. Micro-purge gas probes and PDS wells were installed at depths of 2, 4, 6, and 8 feet bgs at each location.

Soil gas samples were collected in Tedlar bags for off-site screening at the H&P fixed laboratory on January 15 and 16. The results were received via telephone on January 16 and 17 and were non-detect (ND) or very low (less than 1 μ g/L) for all compounds. Based on these results, it was determined that the investigation area proposed in the QAPP was not suitable for the investigation. Therefore, a number of alternative areas at NAS Lemoore Site 14 were visited to select a different area for the investigation. Based on a review of available groundwater data and utility maps, it was determined that the most promising area was located on, and immediately east of, the concrete parking lot adjacent to Building 170.

The soil gas probes (micro-purge and macro-purge) and tubing-type clusters were removed from the boreholes at the Building 173 investigation area on January 17 and the soil and groundwater analyses were cancelled. The PDS wells installed at two of the locations (four depths at each location) were left in place. These locations are identified as NT-5A and NT-6A on Figure 2.

On January 18, a geophysical subcontractor was brought back to the site to clear the proposed alternative investigation area east of Building 170. The new locations were cleared and macro-purge soil gas probes were installed at locations ST-3, ST-6, and NT-4 at depths of 2, 4, 7, and 10 feet bgs (Table 1). Soil samples were not collected from these three locations due to time constraints. The soil gas probes were allowed to equilibrate and soil gas samples were collected in Tedlar bags for off-site screening at the H&P fixed laboratory over the weekend.

The results were received on January 19 and TCE and PCE were found to be present in the samples at concentrations ranging from 50 to $670 \,\mu\text{g/m}^3$. A conference call between EPA, Tetra Tech, and H&P was held on January 20 and it was decided that the investigation should proceed at the new investigation area east of Building 170. A set of two transects were quickly laid out within this new investigation area, with the number and spacing of planned sampling locations essentially the same as originally planned at the Building 173 investigation area (Figure 2).

2.1.2 Week of January 21

The sampling locations along the two transects at the new investigation area, east of Building 170, were identified as ST-1 through ST-6 along the south transect and NT-1 though NT-6 along the north transect (Figure 3). On January 22, concrete coring was conducted at the four locations that were on the concrete slab of the Building 170 parking lot (NT-1, NT-2, ST-1, and ST-2). Drilling, soil sampling, and macropurge soil gas probe installation were conducted at locations ST-4, ST-5, and NT-3. Soil sampling and soil gas probe installation were conducted at 2, 4, 7, and 10 feet bgs (Table 1). Grab groundwater samples were collected at locations ST-4 and NT-3.

On January 23, the field team attempted to continue drilling and soil gas probe installation. It had been raining overnight and was raining heavily on January 23. The first location attempted was ST-2, which is on the concrete slab of the parking lot. The location was drilled to 4 feet bgs; however, when the drill rod was removed from the borehole, it immediately filled with water. A bailer was obtained and an attempt was made to bail the water out of the borehole; however, the borehole immediately filled up again with water and it was determined that significant amounts of run-off were flowing under the concrete slab and filling the borehole. As these conditions precluded the installation of soil gas probes, an attempt was made to drill at NT-6, located off the concrete slab. However, the drill rig quickly got stuck in the mud before reaching the sampling location. Based on these conditions, it was decided not to continue the drilling program until the rain stopped and the ground had dried out. The weather forecast called for continued rain through the following week; therefore, the field investigation was put on weather hold.

Table 1 Macro-Purge Soil Gas Probe Installation Details

Location ID	Probe ID	Installation Date	Coordinates (Easting/ Northing)	Probe Depth (feet bgs)	Length of Sandpack (inches)	System Volume (ml)
Primary S	Sampling Tr	ansects (Figur	e 3)	- 1	1	1
ST-1	ST1-SS	February 11	5988987.22/ 2674264.40	Sub Slab	2	2
	ST1-2			2	6	4
	ST1-4			4	6	6
	ST1-7			7	6	9
	ST1-10			10	6	12
ST-2	ST2-SS	February 11	5989001.35/ 2674270.68	Sub Slab	2	2
	ST2-2			2	6	4
	ST2-4			4	6	6
	ST2-7			7	6	9
	ST2-10			10	6	12
ST-3	ST3-2	January 18	5989007.09/ 2674271.47	2	6	4
	ST3-4			4	6	6
	ST3-7			7	6	9
	ST3-10			10	6	12
	Tubing			6.25	18	7 (28) 1
ST-4	ST4-2	January 22	5989024.26/ 2674281.30	2	6	4
	ST4-4			4	6	6
	ST4-7			7	6	9
	ST4-10			10	6	12
ST-5	ST5-2	January 22	5989042.33/ 2674289.17	2	6	4
	ST5-4			4	6	6
	ST5-7			7	6	9
	ST5-10			10	6	12
ST-6	ST6-2	January 18	5989060.69/ 2674296.24	2	6	4
	ST6-4			4	6	6
	ST6-7			7	6	9
	ST6-10			10	6	12
	Tubing			6.25	18	7 (28) ¹
NT-1	NT1-SS	February 12	5988972.30/ 2674294.76	Sub Slab	2	2
	NT1-2			2	6	4
	NT1-4			4	6	6
	NT1-7			7	6	9
_	NT1-10			10	6	12

Revision: 0 May 2008 Date: Page: 5

Table 1 (cont.) **Macro-Purge Soil Gas Probe Installation Details**

Location ID	Probe ID	Installation Date	Coordinates (Easting/ Northing)	Probe Depth (feet bgs)	Length of Sandpack (inches)	System Volume (ml)
Primary S	Sampling Tr	ansects (Figur	e 3)	l		
NT-2	NT2-SS	February 12	5988986.95/ 2674302.07	Sub Slab	2	2
	NT2-2			2	6	4
	NT2-4			4	6	6
	NT2-7			7	6	9
	NT2-10			10	6	12
NT-3	NT3-2	January 22	5988990.25/ 2674303.85	2	6	4
	NT3-4			4	6	6
	NT3-7			7	6	9
	NT3-10			10	6	12
NT-4	NT4-2	January 18	5989011.36/ 2674313.23	2	6	4
	NT4-4			4	6	6
	NT4-7			7	6	9
	NT4-10			10	6	12
NT-5	NT5-2	February 12	5989026.97/ 2674321.15	2	6	4
	NT5-4			4	6	6
	NT5-7			7	6	9
	NT5-10			10	6	12
NT-6	NT6-2	February 12	5989045.05/ 2674328.40	2	6	4
	NT6-4			4	6	6
	NT6-7			7	6	9
	NT6-10			10	6	12
Abandone	ed Sampling	Transect (Fig	ure 2)		•	
NT-5A ²	NA	January 16	5988573.77/ 2673996.92	2	NA	NA
				4	NA	NA
				6	NA	NA
				8	NA	NA
NT-6A ²	NA	January 16	5988557.06/ 2673987.77	2	NA	NA
				4	NA	NA
				6	NA	NA
				8	NA	NA
		i	1		<u> </u>	

Notes:

- Polyethylene tubing is 1/4 inch in diameter (4 ml/foot), all other tubing types are 1/8 inch in diameter (1 ml/foot). Passive diffusion well only 1

bgs below ground surface

ml milliliters

The micro-purge probe installation protocol does not require construction of the probe in an open hole; therefore, the micro-purge probe installation was not impacted by the under-flow of rain water beneath the slab and EPA installed micro-purge soil gas probes at locations ST-1 and ST-2 on the concrete slab.

2.1.3 Week of February 11

On February 11, soil and grab-groundwater sampling and macro-purge soil gas probe installation was conducted at locations ST-1 and ST-2 (Figure 3, Table 1). Soil gas probes were installed sub-slab, and at 2, 4, 7, and 10 feet bgs. Soil samples were collected from 2, 4, 7, and 10 feet bgs. EPA installed micro-purge soil gas probes at 2, 4, 7, and 10 feet bgs at locations ST-5 and ST-6.

On February 12, soil sampling and macro-purge soil gas probe installation was conducted at locations NT-1, NT-2, NT-5, and NT-6 at 2, 4, 7, and 10 feet bgs. In addition, sub-slab soil gas probes were installed at NT-1 and NT-2. Grab groundwater samples were collected at NT-1 and NT-6.

As discussed in Section 2.1.1, due to time constraints, soil samples were not collected at locations ST-3, ST-6, and NT-4 when the soil-gas probes were installed on January 18. This was discussed with Brian Schumacher in the field, and it was agreed that soil samples should be collected at locations ST-3 and ST-6, but were not necessary from NT-4. On February 12, a new borehole was drilled immediately adjacent to location ST-6 and soil samples were collected at 2, 4, 7, and 10 feet bgs and a grab groundwater sample was collected. On February 13, a new borehole was drilled immediately adjacent to location ST-3 and soil samples were collected at 2, 4, 7, and 10 feet bgs.

Tubing-type clusters were installed at locations ST-3 and ST-6 at 6.5 feet bgs on February 13. The tubing-type clusters consisted of a bundle of six different tubing types, each with a gas-permeable tip, installed similarly to the other macro-purge soil gas probes, with the exception that the sand pack was 18 inches rather than 6 inches. The rationale was that while the regular macro-purge probes were intended to sample a specific depth, the objective of the tubing-type clusters was to assess the effect of tubing type on measured soil gas concentrations, and the longer sand pack would better accommodate the larger purge volume that would be associated with purging multiple probes (each tubing type) in quick succession. The tubing types were stainless steel, copper, polyetheretherketone (PEEK), Teflon, Nylaflow, and polyethylene. All of the tubing types were 1/8-inch diameter with the exception of the polyethylene, which was only available in 1/4-inch diameter.

On February 13, EPA completed installation of the micro-purge soil gas probes at locations ST-1, ST-2, ST-3, and ST-4 and constructed PDS wells at locations ST-1, ST-2, ST-3, and ST-5 (Figure 2). Micropurge soil gas probes and PDS wells were installed at depths of 2, 4, 7, and 10 feet bgs.

3.0 SOIL AND GROUNDWATER SAMPLE ANALYSES

Soil and groundwater samples were submitted to American Environmental Testing Laboratory, Inc. (AETL) in Burbank, California for VOC analysis via EPA method SW8260B.

Due to the low concentrations of soil gas detected in the screening soil gas samples (Section 2.1.1), three soil samples collected on January 22 (ST4-4, ST4-7Q, and ST4-10) were submitted to AETL for VOC analysis on a 24-hour turn-around-time basis. The results for all three samples were ND for all compounds; therefore, the remaining soil samples collected on January 22 and all subsequent soil samples were archived at the laboratory pending a decision from EPA on which samples should be analyzed.

Based on instructions received from EPA on February 22, the 10-foot bgs soil sample from ST-5, and all of the soil samples from NT-1, NT-2, and NT-3 were analyzed. A total of 17 soil samples, including one duplicate, were analyzed. Table 2 summarizes the soil samples analyzed during the project.

Table 2 Soil Sample Summary

Location	Depth (feet bgs)	Sample ID	Collection Date
NT-1	2	NT1-2	2/12/08
	4	NT1-4	2/12/08
	7	NT1-7	2/12/08
	10	NT1-10	2/12/08
NT-2	2	NT2-2	2/12/08
	4	NT2-4	2/12/08
	7	NT2-7	2/12/08
	10	NT2-10Q	2/12/08
NT-3	2	NT3-2	1/22/08
	4	NT3-4	1/22/08
	7	NT3-7	1/22/08
	10	NT3-10	1/22/08
ST-4	4	ST4-4	1/22/08
	7	ST4-7Q	1/22/08
	10	ST4-10	1/22/08
ST-5	10	ST5-10	1/22/08
	10	FieldDup4	1/22/08

Grab groundwater samples were collected from a subset of the sampling locations and analyzed for VOCs to evaluate the groundwater concentrations directly beneath the soil gas sampling probes. Table 3 summarizes the groundwater samples collected and analyzed during the project.

Table 3
Groundwater Sample Summary

Location	Depth (feet bgs)	Sample ID	Collection Date
NT-1	11.2	NT1-GW	2/12/08
NT-3	NR	NT3-GW	1/22/08
NT-6	10.7	NT6-GW	2/12/08
ST-1	10.9	ST1-GW	2/11/08
ST-2	11.2	ST2-GW	2/11/08
ST-4	11.5	ST4-GW	1/22/08
ST-6	10.7	ST6-GW	2/12/08

Definition:

NR not recorded

4.0 SOIL GAS SAMPLING AND ANALYSIS

Soil gas sampling was conducted during the week of February 25. An on-site mobile laboratory from H&P was used to analyzed soil gas samples. Macro-purge soil gas probes were purged using disposable

60-ml polypropylene syringes attached to 3-way Swagelok valves and samples were collected in the syringes after purging.

Purge tests were conducted at five different macro-purge probes. On February 25, purge volume tests were conducted at probes NT4-10, ST1-10, and ST3-10. At probes NT4-10 and ST1-10, samples were collected after purging 1, 2, and 5 system volumes and at probe ST3-10 after purging 2, 3, and 5 system volumes. On February 26, purge volume tests at 2, 3, and 5 system volumes were conducted on probes ST2-10 and ST4-10. The system volumes for each probe are indicated on Table 1. Based on the results of the purge tests, a purge volume equal to 3 system volumes was selected for the sampling program.

Micro-purge soil gas probes were purged and sampled using glass syringes provided by EPA. A single system volume was purged from each micro-purge probe followed by collection of a 2.5 ml sample. System volumes for the micro purge probes were assumed to be 2.0, 2.1, 2.1, and 2.2 ml for the 2-, 4-, 7-, and 10-foot deep probes, respectively.

A total of 206 soil vapor samples were collected from February 25 through 29. These comprised 15 purge volume test samples, 118 macro-purge samples (including 12 duplicates), 49 micro-purge samples (including six duplicates), and 24 tubing cluster samples. Each soil gas probe was sampled a minimum of two times during the sampling program.

5.0 AUTO-SAMPLER INSTALLATION

The auto-sampler and HOBO weather station were deployed on February 29 and March 3. The auto-sampler was integrated with 13 of the macro-purge probes along the southern transect:

- ST1-SS
- ST1-2
- ST1-4
- ST1-7
- ST2-SS
- ST2-2
- ST2-4
- ST2-7ST3-2
- ST3-4
- ST3-7
- ST4-2
- ST4-4

These probes were selected as they provided three complete vertical profiles at the locations that had the highest measured VOC concentrations. In addition, selection of four adjacent locations along a single transect provided logistical advantages.

The HOBO weather station was set up to measure ambient temperature, barometric pressure, relative humidity, wind speed, wind direction, and rain fall. In addition, soil moisture probes, integrated with the HOBO weather station, were collocated with vapor probes ST1-4, ST3-2, ST3-4, ST3-7, ST4-2, and ST4-4.

6.0 FIELD QUALITY CONTROL

Duplicate field samples were collected at a rate of approximately 11 percent for macro-purge samples and 14 percent for micro-purge samples. This exceeds the requirements of the QAPP.

Leak tests were conducted at five of the 2-foot bgs macro-purge probes: ST2-2, ST4-2, ST6-2, NT1-2, and NT3-2. The leak tests were done at the shallowest probes (i.e. 2 feet bgs) as these are considered the most likely to leak as they have the shortest column of hydrated bentonite to seal out ambient air. All five of the probes passed the leak tests, with no leak-test compound detectable in the samples. Based on these results, the probes were assumed to be well sealed and no additional leak tests were conducted.

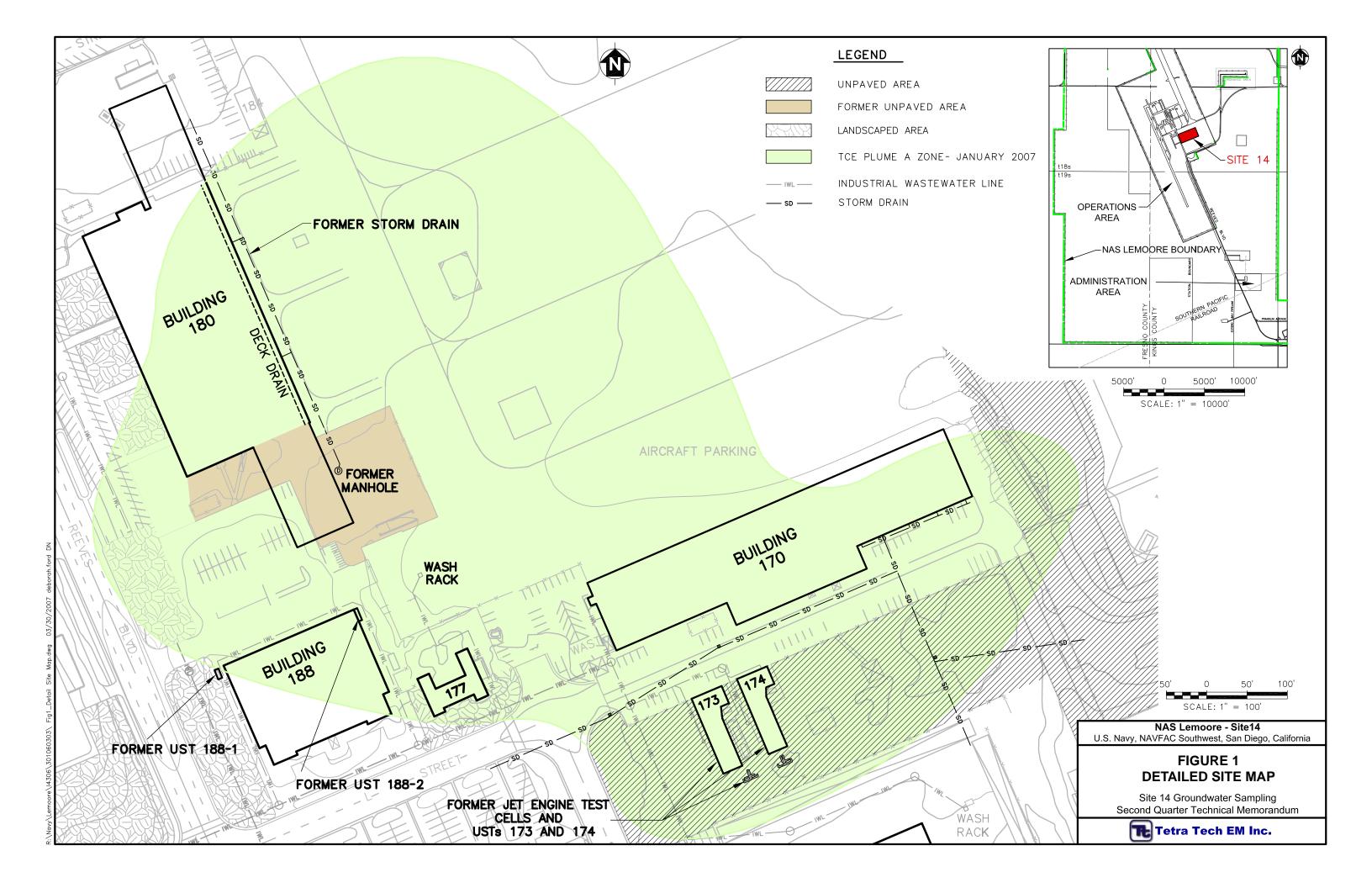
7.0 HEALTH AND SAFETY

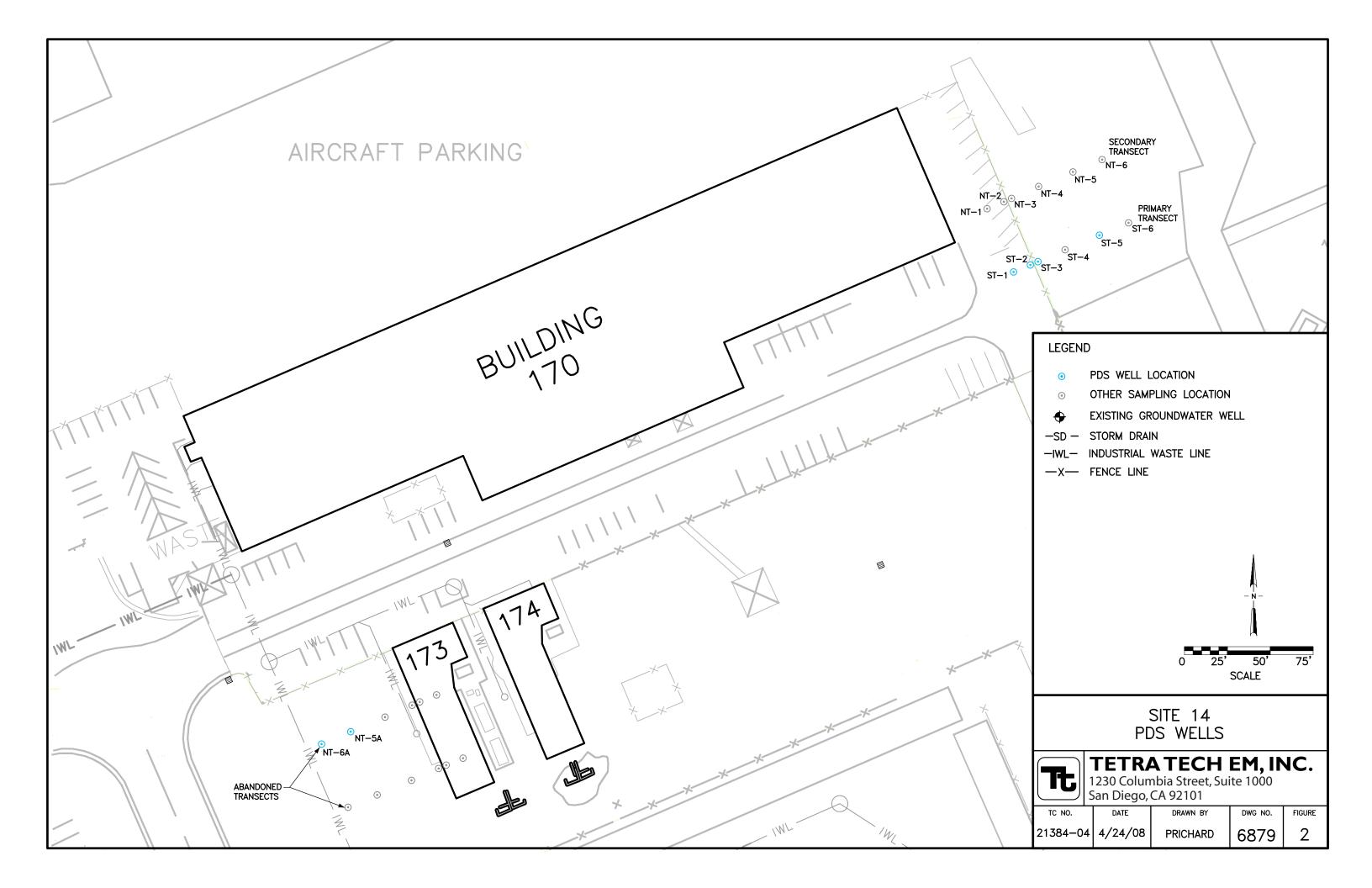
Each field team member was required to sign a form acknowledging they had received and understood the site-specific health and safety plan. Each day of field work began with a Tailgate Health and Safety meeting followed by equipment checking and preparation. The daily health and safety meetings were conducted by the Tetra Tech site supervisor and covered site-specific health and safety concerns including physical, chemical, and biological hazards.

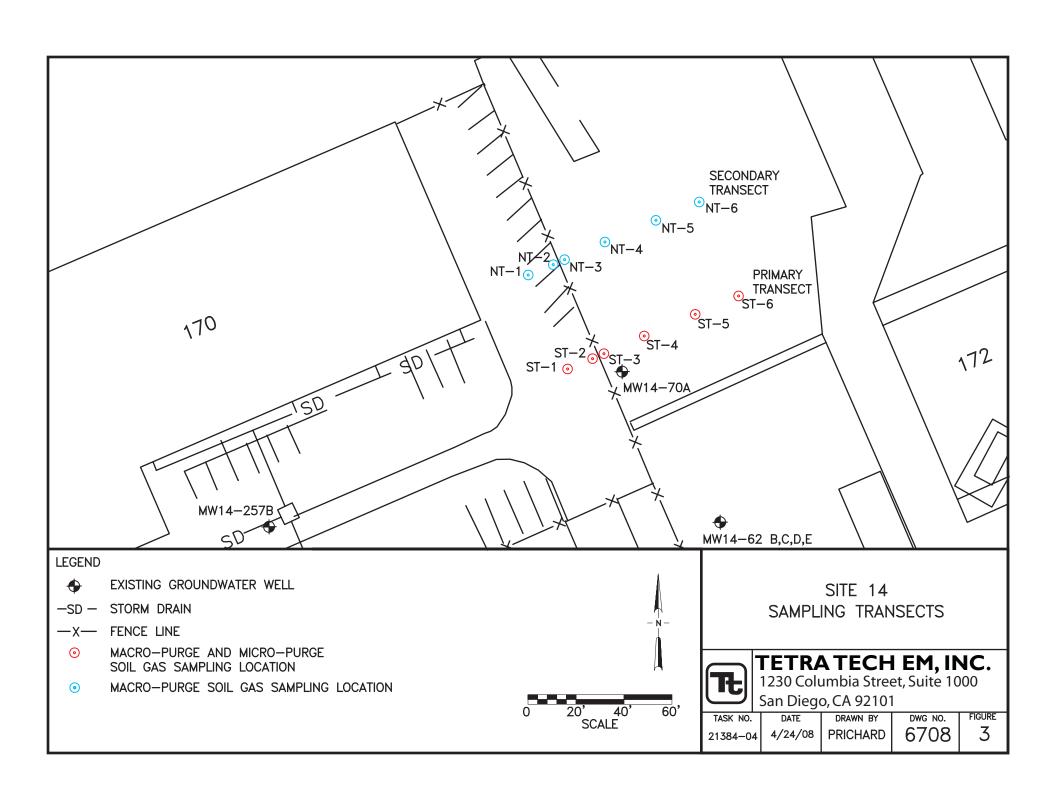
There were no accidents or other health and safety incidents during the field program.

FIGURES

(3 Pages)







PHOTOGRAPHIC LOG

(10 Pages)



Photograph 1: Concrete coring at Building 173 slab.



Photograph 2: Concrete core holes at location ST-2



Photograph 3: Installation of macro-purge soil gas probes with H&P Stratoprobe rig.



Photograph 4: Installation of PDS wells.



Photograph 5: Drilling hole in slab for sub-slab soil gas probe



Phtograph 6: Installation of sub-slab soil gas probe.



Photograph 7: Pouring sandpack for sub slab soil gas probe.



Photograph 8: EPA installing micro-purge soil gas probes.



Photograph 9: EPA installing micro-purge soil gas probes.



Photograph 10: Tubing-type cluster.



Photograph 11: Southern transect looking west. Building 170 visible in right background.



Photograph 12: Southern transect looking east. Micro-purge probes in foreground, macro-purge probes and sub-slab probe behind micro-purge probes.



Photograph 13: PDS wells in background, micro-purge probes in middle ground, macro-purge probes and tubing-type cluster in foreground.



Photograph 14: PDS well, micro-purge probe, and macro-purge probe installations on slab.



Photograph 15: PDS vial (with yellow cap) in holding device.



Photograph 16: Polypropylene (upper) and glass (lower) sampling syringes.



Photograph 17: Auto-sampler RV. Conduit containing Nylaflow tubing from macro-purge purge probes on left.



Photograph 18: Auto-sampler RV. Conduit running from probe locations to RV visible in middle ground.



Photograph 19: Locations ST-2 (left) and ST-3 (right) in foreground, HOBO weather station in background.



Photograph 20: HOBO weather station.

APPENDIX B PASSIVE DIFFUSION SAMPLER SOP

RSKSOP-306 Revision No. 0 January 2009 Page 1 of 10 Cynthia J. Paul Ken Jewell

STANDARD OPERATING PROCEDURE

PREPARATION AND IMPLEMENTATION OF NEW PASSIVE DIFFUSION SAMPLERS FOR GROUND WATER AND/OR SOIL GAS

1. Disclaimer

This standard operating procedure has been prepared for the use of the Groundwater and Ecosystems Restoration Division of the U.S. Environmental Protection Agency and may not be specifically applicable to the activities of other organizations. **THIS IS NOT AN OFFICIAL EPA APPROVED METHOD**. This document has not been through the Agency's peer review process or ORD clearance process.

2. Purpose (Scope and Application)

This document describes the procedure used to collect ground water and/or soil gas samples at contaminated sites where vertical contaminant profiling of VOCs (Volatile Organic Compounds) is important for site characterization and risk assessment. The procedure employs the use of a newly developed passive diffusion sampler (PDS).

3. Method Summary

Passive diffusion samplers are constructed using 40 ml VOA vials where the Teflon septa is replaced with a permeable membrane. The PDS is inserted into a custom-made messenger and deployed down monitoring wells which have been installed with 2-inch diameter screened intervals. The permeable membrane in the PDS is exposed to the screened-interval and contaminants diffuse through the membrane into the water-filled PDS. The PDS are recovered from the wells after an appropriate equilibration period, typically one month for most VOCs, and analyzed for contaminants of concern.

4. Reagents/Chemicals/Gases

Trisodium phosphate (TSP) Na₃PO₄ dodecahydrate – directly from the vendor.

RSKSOP-306 Revision No. 0 January 2009 Page 2 of 10 Cynthia J. Paul Ken Jewell

5. Equipment/Apparatus

- PDS Vials 40 ml VOA vial fitted with modified caps where the Teflon® septa is replaced with a 25 mm diameter Supor® membrane (0.2 µm pore size). A 15 mm hole is punched through the center of the Teflon-faced silicone rubber septum. The 25 mm diameter Supor® membrane is inserted into the screw cap. The Teflon-faced silicone rubber septum containing the hole is used as an o-ring to hold the membrane in place, with the Teflon-faced side facing the mouth of the 40 ml vial.
- Messengers used to hold the PDS within the monitoring well.
- Safety cable hooked to the top of the messenger. The cable is used to retrieve the messenger and PDS vial from monitoring wells. The cable should be of sufficient length to extend from the installed messenger to the top of the well, with enough excess rope to attach securely at the surface.
- PVC Rod in excess of well depth, used to push the messenger down to the bottom of the monitoring well.
- Peristaltic pump used to evacuate air within the monitoring well as the messenger is lowered into the well. This eliminates potential geochemical alteration from air being pushed into the formation.
- PDS Vials are labeled with unique sample identifiers prior to being deployed in monitoring wells.
- Chain of custody forms for sample shipment to the analyzing laboratory.
- Ice and ice chest for shipping samples to laboratory.

6. Health & Safety Precautions

Standard field safety procedures must be followed at all times.

RSKSOP-306 Revision No. 0 January 2009 Page 3 of 10 Cynthia J. Paul Ken Jewell

7. Interferences

VOA samples are subject to contamination by volatile compounds via diffusion through the septa. Care should be taken to store samples to maintain their integrity, i.e., away from sources of possible contamination, such as standards or samples known to contain high concentrations of volatiles.

8. Procedure

Construction of Passive Diffusion Samplers

The passive diffusion sampler (PDS) is a 40 ml VOA vial fitted with modified caps where the Teflon® septa is replaced with a 25 mm diameter Supor® membrane (0.2 μ m pore size) (**Figure 1**). A 15 mm hole is punched through the center of the Teflon-faced silicone rubber septum. The 25 mm diameter Supor® membrane is inserted into the screw cap. The Teflon-faced silicone rubber septum containing the hole is used as an o-ring to hold the membrane in place, with the Teflon-faced side facing the mouth of the 40 ml vial. Each PDS is loaded with 0.4 \pm 0.1 gram of trisodium phosphate dodecahydrate as a preservative, then 40 ml deionized water is added to each vial. The vials are capped and the cap is covered with parafilm to prevent dehydration. The parafilm is removed prior to deploying in monitoring wells.

Construction of Messengers

- High density polyethylene (HDPE) round stock (2.05"dia.) is cut to length (6.25") and placed in a lathe chuck.
- The ends are faced using a parting tool. The final length is 6.0".
- A 7/16" drill bit is used to drill a 0.435" diameter, 3.0" deep hole in one end (top end).
- A 1.125" hole is drilled to a depth of 3.75" in the other end (bottom end). This is for placement of the PDS vial.
- The locations of the two sealing vanes are marked on the outside of the stock. (1.10" and 3.40" from the bottom end.

RSKSOP-306 Revision No. 0 January 2009 Page 4 of 10 Cynthia J. Paul Ken Jewell

- Using a parting tool, two 0.15" grooves (vane detent) are cut to create each 0.04" thick vane.
- The HDPE shaft is turned down to an outside diameter of 1.95", leaving the vanes at 2.05" diameter.
- The 0.435" hole at the top of the messenger is threaded to accommodate a 0.25" compression fitting for the pump tubing.
- A stainless steel eye bolt (0.02 X 1.0 inch) is threaded into the large opening end to hold the PDS vial.
- Using the 0.25 inch compression fitting as a fastening point, 1/16 inch diameter stainless steel, plastic coated braided wire is stripped to 1.0" and the wire is wrapped around the threaded shaft of the compression fitting between the two thread points. A 0.0626" aluminum crimp ferrule is used to secure the wire around the shaft.
- 0.25" pump polyethylene tubing is attached to the messenger via the compression fitting. The tubing accompanies the retrieval wire to the top of the well casing after the messenger is deployed within the monitoring well. This is secured to an ExCap (quick connect vented J-plug).

Monitoring System

The monitoring system consists of a cluster of 2-in diameter PVC monitoring wells installed at discrete depths with 2-in screened intervals (**Figure 2**). The messenger containing the PDS is lowered into each monitoring well so that the cap of the PDS is exposed within the well screened interval. The PDS is left in the monitoring well for approximately one month.

PDS Messenger Insertion

The PDS vial is inserted into the bottom of the messenger so that the cap is exposed at the bottom of the messenger (**Figure 3**). A zip tie is looped through the eyebolt on the bottom of the messenger and around the vial cap and closed to secure the vial within the messenger. The messenger is lowered into the top of the monitoring well.

RSKSOP-306 Revision No. 0 January 2009 Page 5 of 10 Cynthia J. Paul Ken Jewell

The peristaltic pump is connected to the tubing extending from the top of the messenger. The peristaltic pump is turned on at a rate of approximately 1 L/min for one minute to evacuate air inside the well casing below the messenger. The messenger is lowered one foot following every minute of air purging.

The PVC rod is used to push the messenger into the monitoring well. The depth of the well and screened interval is known. This depth, minus the length of the messenger, is measured and marked on the PVC rod. The rod is lowered until the marked depth is reached.

Secure the safety cable to the well cap before closing the well.

PDS Messenger Retrieval

The PDS is retrieved after a minimum equilibration time of one month by pulling on the sampler retrieval cable. After the PDS has been recovered, the modified screw cap is immediately replaced with a screw cap fitted with a solid Teflon-faced silicone rubber septum. Samples are placed on ice for storage and shipment to the laboratory for analysis.

9. QA/QC

- This procedure is to be carried out by trained personnel.
- Trisodium phosphate is added to each PDS vial prior to filling with water. The 1% concentration (0.4 gm) is in excess of the amount needed to preserve the sample against bacterial degradation. All samples must be analyzed within the determined holding time period for each particular analysis.
- Field duplicate samples can be obtained by splitting a sample into two 40 ml VOA vials and diluting with deionized water. This should be conducted in the laboratory so that accurate weights can be obtained for correcting data after analysis.
- Spiking known concentrations of contaminant(s) of interest into selected samples may be desirable.
- Each porous membrane will be used for only one sampling event.

RSKSOP-306 Revision No. 0 January 2009 Page 6 of 10 Cynthia J. Paul Ken Jewell

- Latex or other lab gloves (unpowdered) will be worn when weighing TSP and placing it in the PDS vials and adding water to the PDS vials.
- Torn or broken membranes will not be used.
- The PDS vials will be checked for air bubbles prior to placing them in the messenger.
- Several samples of the water used to fill the PDS's shall be retained in the laboratory and one or more will be submitted along with the samples for analysis of analytes of concern.
- A trip blank (VOA vial filled with blank water) will be included with VOA samples in each ice chest.

10. Calculations

Because the data are reported as mg/L in water, the contaminant concentration in soil gas is calculated by multiplying the concentration of contaminant of concern in water (mg/L) by the dimensionless Henry's Law Constant, then dividing by the molecular weight of the specific contaminant of concern.

11. Miscellaneous Notes

- No purging, pumping, or external energy source is required because sampling is accomplished through natural diffusion across the membrane.
- Since no well purging is required, the quantity of waste water is significantly reduced.
- The PDS allows for sampling soil gas in the vadose zone, which is then converted from an aqueous concentration of μ g/L to ppmv or mg/M³ for vapor concentration.
- The PDS allows sampling from a very discrete subsurface zone.
- High sample integrity is maintained because the membrane cap is immediately replaced upon retrieval from the well. There is no sample transfer, further reducing concentration losses from volatile organic compounds (VOCs).

RSKSOP-306 Revision No. 0 January 2009 Page 7 of 10 Cynthia J. Paul Ken Jewell

• The PDS is portable and can easily be moved from well to well for comprehensive soil gas and groundwater sampling at any given site and may provide solution for sampling tight formations.

12. References

None.

RSKSOP-306 Revision No. 0 January 2009 Page 8 of 10 Cynthia J. Paul Ken Jewell

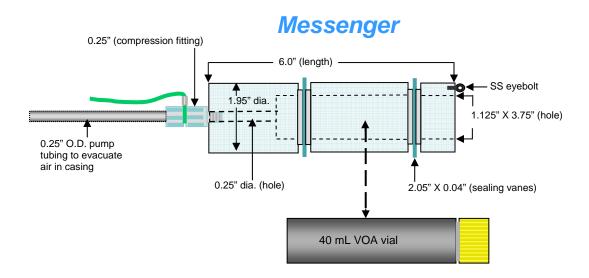


Figure 1. Schematic of PDS and messenger.

RSKSOP-306 Revision No. 0 January 2009 Page 9 of 10 Cynthia J. Paul Ken Jewell

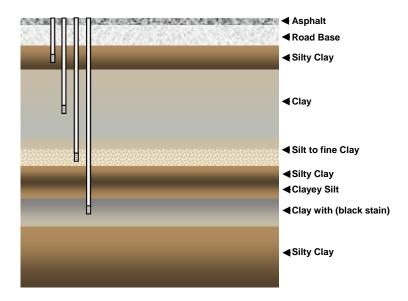


Figure 2. Example of depth discrete vapor monitoring wells with 2-in screened intervals.

RSKSOP-306 Revision No. 0 January 2009 Page 10 of 10 Cynthia J. Paul Ken Jewell

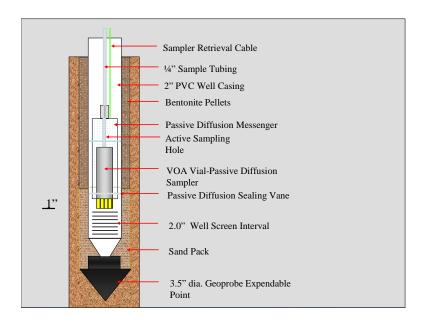


Figure 3. Schematic of the PDS and messenger deployed within the monitoring well screened interval.

APPENDIX C LABORATORY DATA PACKAGES



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

4213 State Street Suite 100 Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 5

01/23/2008 Date Received Date Reported 01/24/2008

Job Number	Order Date	Client
45767	01/23/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 3 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

TETRA TECH, INC. 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

640 14 - Discourt Bar Str. D. B. A. T. CHAIN OF CUSTODY RECORD DATE 1/22/04 PAGE OF 1 SITE LEMOORE S.R. 14

OBSERVATIONS/COMMENTS: SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS: -TEMPERATURE BLANK FOTAL NUMBER OF CONTAINERS EACH COOLER: TURN-AROUND TIME: / (こ) METHOD OF SHIPMENT 7 24 Filtered Sample $\dot{\boldsymbol{\varpi}}$ Aumber of Containers Water samples are preserved as indicated on the sample labels. .)-Container Type Alatrix Type ユンギギグ もながどの Ail samples are preserved at 4° C. DATE: ANALYTICAL METHODS E300 CF'S / 31011 ALK / 16011 TDS IV muimo1/199 Chromium VI PRESERVATIVES oines1A 080Y \ 0108W6 *IETRA TECH, INC.* 5W6010 / 7470 / 7471 CAM17 Metals **SHA9 MIS 01S8W8** SW8270 SVOCs 2M8082 PCBs COMPANY: COMPANY COMPANY SS = Stainless Steel W8015 Diesel / Gas / Carbon Chain SW8260 EDC, EDB SW8260 MTBE, ETBE, TBA, TAME, DIPE G = Glass P = Plastic PW8260 VOCs / BTEXATENUS 20 1205 12263 1155 TIME CONTAINER TYPE: 70-65 DATE SIGNATURE: SIGNATURE SIGNATURE PROJECT NAME STREAMS カアカ T21384-02 SAMPLE ID W = Water SAMPLERS (Signatures) S = Soil PROJECT MANAGER 514. 7B CLIENT V.S. P-61/ ELINQUISHED BY 1715 RECEIVED BY: MATRIX TYPE: <u></u>



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

 AETL Job Number
 Submitted
 Client

 45767
 01/23/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012308

Our Lab I.D.			Method Blank	45767.01	45767.02	45767.03	
Client Sample I.D.				ST4-4	ST4-7Q	ST4-10	
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared			01/23/2008	01/23/2008	01/23/2008	01/23/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/23/2008	01/23/2008	01/23/2008	01/23/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	25	50	ND	ND	ND	ND	
Benzene	2.0	10.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	5.0	10.0	ND	ND	ND	ND	
Bromochloromethane	5.0	10.0	ND	ND	ND	ND	
Bromodichloromethane	5.0	10.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	25	50	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	15	30	ND	ND	ND	ND	
2-Butanone (MEK)	25	50	ND	ND	ND	ND	
n-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
sec-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
tert-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
Carbon Disulfide	25	50	ND	ND	ND	ND	
Carbon tetrachloride	5.0	10.0	ND	ND	ND	ND	
Chlorobenzene	5.0	10.0	ND	ND	ND	ND	
Chloroethane	15	30	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	50	50	ND	ND	ND	ND	
Chloroform (Trichloromethane)	5.0	10.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	15	30	ND	ND	ND	ND	
2-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
4-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	25	50	ND	ND	ND	ND	
Dibromochloromethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	5.0	10.0	ND	ND	ND	ND	
Dibromomethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45767
 01/23/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012308

Client Sampled Date Sampled ST4-4 ST4-7Q ST4-10 Date Sampled Date Prepared D1/22/2008 D1/22/2008 D1/22/2008 D1/22/2008 D1/22/2008 D1/22/2008 D1/22/2008 D1/23/2008 D1/
Date Prepared
Decimal Preparation Method Decimal Prepar
Date Analyzed
Soil Soil Soil Soil Soil Soil Soil Soil Units Ug/Kg Ug/K
Units ug/Kg ug/Kg ug/Kg ug/Kg Dilution Factor 1 1 1 1 Analytes MDL PQL Results Results Results Dichlorodifluoromethane 1.5 30 ND ND ND ND 1,1-Dichloroethane 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,1-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND ND 1,2-Dichloroethane (EDC) (
Dilution Factor
Analytes MDL PQL Results Results Results Dichlorodifluoromethane 15 30 ND ND ND ND 1,1-Dichloroethane 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,1-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,1-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,1-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) (Inchity) 5.0 10.0 ND ND ND ND 1,2-Dichloropropane (Inchity) 5.0 10.0 ND ND ND ND 1,3-Dichloropropane (Inchity) 5.0 10.0 ND ND ND ND 1,1-Dichlor
Dichlorodifluoromethane 15 30 ND ND ND ND 1,1-Dichloroethane 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,1-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND ND 1,2-Dichloroptopane (EDC) 5.0 10.0 ND
1,1-Dichloroethane 5.0 10.0 ND ND </td
1,2-Dichloroethane (EDC) 5.0 10.0 ND
1,1-Dichloroethene 5.0 10.0 ND ND </td
cis-1,2-Dichloroethene 5.0 10.0 ND
trans-1,2-Dichloroethene 5.0 10.0 ND ND <t< td=""></t<>
1,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,3-Dichloropropane 5.0 10.0 ND ND ND ND 2,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,1-Dichloropropene 5.0 10.0 ND ND ND ND cis-1,3-Dichloropropene 5.0 10.0 ND ND ND ND trans-1,3-Dichloropropene 5.0 10.0 ND ND ND ND
1,3-Dichloropropane 5.0 10.0 ND ND<
2,2-Dichloropropane 5.0 10.0 ND ND<
1,1-Dichloropropene 5.0 10.0 ND ND ND ND cis-1,3-Dichloropropene 5.0 10.0 ND ND ND ND trans-1,3-Dichloropropene 5.0 10.0 ND ND ND ND
cis-1,3-Dichloropropene 5.0 10.0 ND ND ND trans-1,3-Dichloropropene 5.0 10.0 ND ND ND
trans-1,3-Dichloropropene 5.0 10.0 ND ND ND ND
Ed-all 2 0 10 0 MD MD MD MD MD
Ethylbenzene 2.0 10.0 ND ND ND ND
Hexachlorobutadiene 15 30 ND ND ND ND
2-Hexanone 25 50 ND ND ND ND
Isopropylbenzene 5.0 10.0 ND ND ND ND
p-Isopropyltoluene 5.0 10.0 ND ND ND ND
4-Methyl-2-pentanone (MIBK) 25 50 ND ND ND ND
Methyl-tert-butyl ether (MTBE) 5.0 10.0 ND ND ND ND
Methylene chloride (DCM) 25 50 ND ND ND ND
Naphthalene 5.0 10.0 ND ND ND ND
n-Propylbenzene 5.0 10.0 ND ND ND ND
Styrene 5.0 10.0 ND ND ND ND
1,1,1,2-Tetrachloroethane 5.0 10.0 ND ND ND ND
1,1,2,2-Tetrachloroethane 5.0 10.0 ND ND ND ND
Tetrachloroethene 0.5 1.0 ND ND ND ND
Toluene (Methyl benzene) 2.0 10.0 ND ND ND ND
1,2,3-Trichlorobenzene 5.0 10.0 ND ND ND ND
1,2,4-Trichlorobenzene 5.0 10.0 ND ND ND ND
1,1,1-Trichloroethane 5.0 10.0 ND ND ND ND
1,1,2-Trichloroethane 5.0 10.0 ND ND ND ND
Trichloroethene 0.5 1.0 ND ND ND ND
Trichlorofluoromethane 5.0 10.0 ND ND ND ND
1,2,3-Trichloropropane 5.0 10.0 ND ND ND ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45767
 01/23/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012308

Our Lab I.D.			Method Blank	45767.01	45767.02	45767.03	
Client Sample I.D.				ST4-4	ST4-7Q	ST4-10	
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared			01/23/2008	01/23/2008	01/23/2008	01/23/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/23/2008	01/23/2008	01/23/2008	01/23/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
Vinyl Acetate	25	50	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	15	30	ND	ND	ND	ND	
o-Xylene	2.0	10.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	20.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	45767.01	45767.02	45767.03	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		79.0	83.4	85.1	80.2	
Dibromofluoromethane	75-125		98.4	106	147	103	
Toluene-d8	75-125		84.3	77.9	83.3	79.7	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02 Project Name: Streams TO-65 Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
45767	01/23/2008	T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 012308; Dup or Spiked Sample: B012308; LCS: Clean Sand; QC Prepared: 01/23/2008; QC Analyzed: 01/23/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	57.50	115	50.00	57.50	115	<1	75-125	<20
Chlorobenzene	0.0	50.00	49.40	98.8	50.00	49.90	99.8	1.0	75-125	<20
1,1-Dichloroethene	0.0	50.00	59.00	118	50.00	59.00	118	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	61.00	122	50.00	59.00	118	3.3	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	47.55	95.1	50.00	48.70	97.4	2.4	75-125	<20
Trichloroethene	0.0	50.00	55.00	110	50.00	56.00	112	1.8	75-125	<20

QC Batch No: 012308; Dup or Spiked Sample: B012308; LCS: Clean Sand; QC Prepared: 01/23/2008; QC Analyzed: 01/23/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	57.00	114	75-125			
Chlorobenzene	50.00	49.60	99.2	75-125			
1,1-Dichloroethene	50.00	60.00	120	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	58.00	116	75-125			
Toluene (Methyl benzene)	50.00	49.10	98.2	75-125			
Trichloroethene	50.00	56.50	113	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	54.00	108	75-125			
Ethylbenzene	50.00	47.60	95.2	75-125			
1,1,1-Trichloroethane	50.00	41.75	83.5	75-125			
o-Xylene	50.00	49.50	99.0	75-125			
m,p-Xylenes	100.00	98.90	98.9	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

4213 State Street Suite 100 Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 9

Date Received 01/24/2008 Date Reported 02/04/2008

Job Number	Order Date	Client
45787	01/24/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 3 soil and 3 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

ETRA TECH, INC. 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

2834 N DOOD ST Burking 915CY SHIPPED TO:

48787

CHAIN OF CUSTODY RECORD

占

PAGE

DATE 1/22/03

JAMCE SIK

SITE

1973).00 しかない。ろ 15. B.c.C かから 7= (846) ととアンナル 15 1931 0 15.67.61 45 787 C SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS: 45787-6 TEMPERATURE BLANK EACH COOLER: YES NO Strandard OBSERVATIONS/COMMENTS: TOTAL NUMBER OF CONTAINERS TURN-AROUND TIME: METHOD OF SHIPMEN elitered Sample 10 N <u>2</u> Number of Containers 7 7 7 うてる 3440 Water samples are preserved as indicated on the sample labels. | | TIME: 三天 5 (: ا Container Type Š S эдүТ хільеМ TIME バンチンド 1124[3 1124103 AHIG A040 All samples are preserved at 4° C. AM23G Metabolic Acids ANALYTICAL METHODS AM20GAX Methane, Ethane, Ethene abiliu2 Suffde PRESERVATIVES E3237 N-N \ E4121 TOC **TETRA TECH, INC.** E300 CF'2 \ 310'1 YFK \ 160'1 LD2 45.60 IV muimordD 8.8123 かにつ SW6010 / 7470 / 7471 CAM17 Metals SHAR MIS 0728WS COMPANY COMPANY SW8270 SVOCs SS = Stainless Steel 2M8082 PCBs SW8081 Pesticides SW815 Diesel / Gas / Carbon Chain P = Plastic SW8260 VOCs アンド 330 5 Ossi. 0,140 3 0320 35.5 38 TIME CONTAINER 122/23 TYPE: 71284-0 SIREAMS ant signature SIGNATURE: SIGNATURE 日 9.4 CHNICLEUL FREGUES SAMPLE ID W = Water 3 S=Soll SAMPLERS (Signatures) PROJECT MANAGER STS-7 ۲ 7 ST5 - 10 e Basino 5-4-5 グージース RECEIVED BY: PROJECT NAME KELINQUISHED BY NTS Fred CLIENT IYPE #2L

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

7

1/2×1/0

COMPANY:

4

Z

TETRA TECH, INC. 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

SHIPPED TO: AFT.

2834 N. Nyamist. 45787

CHAIN OF CUSTODY RECORD

CHAIN OF COSTODY RECORD	122 08 PAGE 2 OF 3	TURN-AROUND TIME:	Stendard	OBSERVATIONS/COMMENTS:	odiuo		45787·11	V5737.12	45787.13	15727-14				TEMPERATURE BLANK EACH COOLER: YES NO	TOTAL NUMBER OF CONTAINERS	MCTHOD OF SUBMENT	COURT OF STATE OF STA	SPECIAL SHIPMENTHANDLING/STORAGE REQUIREMENTS:	
HAIN OF	14 DATE				Type r of Containers Sample	Mumbe	564	<u>₩6.2</u>	W6-3	W G 3				oleven standard standard	TIME:	ري ري ري	2940	TIME:	TIME:
٠	Le moore S. K	SOC	элэл		XA'Methane, Eth									red at 4° C.	DATE:	7.717.2	ilather	DATE: 1/24/c3	DATE: 724/13
	A TISCY SITE	ANALYTICAL METHODS	sar	160.1 T	0 SVOCs 0 SIM PAHs 0 / 7470 / 7471 C Chromium VI 2,5 / 310.1 ALK / N-N / E415.1 TO	326.2 S E363.2 E300 C E218.6 SW601 SW827 SW827									TETRA TECH INC	Note of the control o	ACTU	COMPANY:	COMPANY. AETC
3	De Isaak)		nisdO) nodis	0 VOCs 5 Diesel / Gas / C 1 Pesticides	108WS 808WS	030c [X]	X 350	X 05:01	$ X^{2SH} $				G = Glass SS = Stainless Steel	21001		3	<u>8</u>	30 2
, 681-3100	581-3108	EPA	STREAMS TOCK	1334-02		DATE TII	1/22/03 03	(O)	(C)	h) ^	1			CONTAINER TYPE:	SIGNATURE:		SIGNALUKE:	SIGNATURE:	SIGNATURE / CALLL
Phone (805) 681-3100	FAX (805) 6	CLIENT US	PROJECT NAME STR	TC# TC#	SAMPLERS (Signatures) X X	SAMPLE ID	Field Dony	Trip Right	×1-4-6₩	NT3-6-W				MATRIX S = Soil TYPE: W = Water		Birth Da	Pres une	.∵ ?	uell

Jim Lin 4578

From:

Elliot, James [James.ELLIOT@tetratech.com]

Sent:

Thursday, January 24, 2008 2:11 PM

To:

Jim Lin

Subject:

RE: Results of analysis (In summary) of soil samples from "Streams TO-65, Project No:

T21384-02"

Hi Jim,

As we discussed, the additional samples from Lemoore are dependent upon the results from the rush turn samples. I just received the results from the rush turn samples, and they are all ND. I need to talk to the client about the additional samples you picked up today to see if he wants to go forward with them.

I will get back to you shortly on that.

James Elliot

----Original Message----

From: Cyrus Razmara [mailto:cyrus@aetlab.com]

Sent: Thursday, January 24, 2008 1:39 PM

To: Elliot, James

Subject: Results of analysis (In summary) of soil samples from "Streams

TO-65, Project No: T21384-02"

Dear James:

Herewith please find Results of analysis (In summary) of soil samples from "Streams TO-65, Project No: T21384-02" located in Site 14 Lemoore NAS.

AETL Job No: 45767.

If you have any questions, please call me at 888-288-AETL.

Cyrus Razmara Ph.D.
Laboratory Director
American Environmental Testing Laboratory

Jim Lin

From:

Elliot, James [James.ELLIOT@tetratech.com]

Sent:

Tuesday, January 29, 2008 1:18 PM

To:

Jim Lin

Subject: Samples from last week

Hi Jim,

Finally heard back from the client on the soil samples. These are the samples collected from Lemoore Site 14 on 1/22/08, and picked up by your Courier on 1/24/08.

At this time, we would like to go ahead and analyze the soil samples labeled NT3-10, ST5-10, and Field Dup4. We would also like to have all three of the water samples analyzed: ST4-GW, NT3-GW, and the trip blank.

Please continue to hold the remaining soil samples, as we may analyze those depending on the what we see with the ones listed above.

As always, feel free to call or email with questions.

Thanks James Elliot

R. James Elliot, P.G., C.Hg. | Principal Geologist Main: 805.681.3100, ext. 167 | Mobile: 805.895.5067 | Fax: 805.681.3108

james.elliot@tetratech.com

Tetra Tech | Santa Barbara

4213 State Street, Suite 100 | Santa Barbara, CA 93110 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: T21384-02 Project Name: Streams TO-65 Site 14 Lemoore NAS

Site

AETL Job Number Submitted Client 45787 01/24/2008 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012508

Our Lab I.D.			Method Blank	45787.05	45787.09	45787.11	
Client Sample I.D.				ST5-10	NT3-10	Field Dup 4	
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	25	50	ND	ND	ND	ND	
Benzene	2.0	10.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	5.0	10.0	ND	ND	ND	ND	
Bromochloromethane	5.0	10.0	ND	ND	ND	ND	
Bromodichloromethane	5.0	10.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	25	50	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	15	30	ND	ND	ND	ND	
2-Butanone (MEK)	25	50	ND	ND	ND	ND	
n-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
sec-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
tert-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
Carbon Disulfide	25	50	ND	ND	ND	ND	
Carbon tetrachloride	5.0	10.0	ND	ND	ND	ND	
Chlorobenzene	5.0	10.0	ND	ND	ND	ND	
Chloroethane	15	30	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	50	50	ND	ND	ND	ND	
Chloroform (Trichloromethane)	5.0	10.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	15	30	ND	ND	ND	ND	
2-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
4-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	25	50	ND	ND	ND	ND	
Dibromochloromethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	5.0	10.0	ND	ND	ND	ND	
Dibromomethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45787
 01/24/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012508

Client Sample I.D.	Our Lab I.D.			Method Blank	45787.05	45787.09	45787.11	
Date Prepared	Client Sample I.D.				ST5-10	NT3-10	Field Dup 4	
Preparation Method	Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Analyzed Soil Soil	Date Prepared			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Matrix	Preparation Method			5035A	5035A		5035A	
Units	Date Analyzed							
Dilution Factor				Soil	Soil	Soil	Soil	
Malytes MDL PQL Results Results Results Dichlorodifluoromethane 15 30 ND ND ND ND 1,1-Dichloroethane 5.0 10.0 ND ND ND ND 1,2-Dichloroethane (EDC) 5.0 10.0 ND ND ND ND 1,1-Dichloroethene 5.0 10.0 ND ND ND ND cis-1,2-Dichloroethene 5.0 10.0 ND ND ND ND trans-1,2-Dichloroethene 5.0 10.0 ND ND ND ND 1,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,2-Dichloropropane 5.0 10.0 ND ND ND ND 2,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,1-Dichloropropene 5.0 10.0 ND ND ND ND cis-1,3-Dichloropropene 5.0 <t< td=""><td></td><td></td><td></td><td>ug/Kg</td><td>ug/Kg</td><td>ug/Kg</td><td>ug/Kg</td><td></td></t<>				ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dichlorodifluoromethane	Dilution Factor			1	1	1	1	
1.1-Dichloroethane	Analytes	MDL	PQL	Results	Results	Results	Results	
1,2-Dichloroethane (EDC)	Dichlorodifluoromethane	15	30	ND	ND	ND	ND	
1,1-Dichloroethene	1,1-Dichloroethane	5.0	10.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene 5.0 10.0 ND ND ND ND trans-1,2-Dichloroethene 5.0 10.0 ND ND ND ND 1,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,3-Dichloropropane 5.0 10.0 ND ND ND ND 2,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,1-Dichloropropane 5.0 10.0 ND ND ND ND 1,1-Dichloropropene 5.0 10.0 ND ND ND ND Ethyleachloropropene 5.0	1,2-Dichloroethane (EDC)	5.0	10.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene 5.0 10.0 ND ND ND ND 1,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,3-Dichloropropane 5.0 10.0 ND ND ND ND 2,2-Dichloropropane 5.0 10.0 ND ND ND ND 1,1-Dichloropropene 5.0 10.0 ND ND ND ND cis-1,3-Dichloropropene 5.0 10.0 ND ND ND ND trans-1,3-Dichloropropene 5.0 10.0 ND ND ND ND Ethylbenzene 2.0 10.0 ND ND ND ND Hexachlorobutadiene 15 30 ND ND ND ND 2-Hexanone 25 50 ND ND ND ND Isopropyllenzene 5.0 10.0 ND ND ND ND P-Isopropylloulene 5.0 10.0 <td>1,1-Dichloroethene</td> <td>5.0</td> <td>10.0</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td></td>	1,1-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
1,2-Dichloropropane 5.0 10.0 ND ND<	cis-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
1,3-Dichloropropane 5.0 10.0 ND ND ND ND ND ND ND N	trans-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
10.0 ND	1,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
1,1-Dichloropropene 5.0 10.0 ND ND<	1,3-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene 5.0 10.0 ND ND ND ND trans-1,3-Dichloropropene 5.0 10.0 ND ND ND ND Ethylbenzene 2.0 10.0 ND ND ND ND Hexachlorobutadiene 15 30 ND ND ND ND 2-Hexanone 25 50 ND ND ND ND Isopropylbenzene 5.0 10.0 ND ND ND ND P-Isopropyltoluene 5.0 10.0 ND ND ND ND 4-Methyl-2-pentanone (MIBK) 25 50 ND ND ND ND Methyl-tert-butyl ether (MTBE) 5.0 10.0 ND ND ND ND Methylene chloride (DCM) 25 50 ND ND ND ND Naphthalene 5.0 10.0 ND ND ND ND N-Propylbenzene 5.0 10.0 </td <td>2,2-Dichloropropane</td> <td>5.0</td> <td>10.0</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td></td>	2,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene 5.0 10.0 ND ND ND ND Ethylbenzene 2.0 10.0 ND ND ND ND Hexachlorobutadiene 15 30 ND ND ND ND 2-Hexanone 25 50 ND ND ND ND ND Isopropylbenzene 5.0 10.0 ND ND ND ND ND p-Isopropyltoluene 5.0 10.0 ND ND ND ND ND ND 4-Methyl-2-pentanone (MIBK) 25 50 ND ND </td <td>1,1-Dichloropropene</td> <td>5.0</td> <td>10.0</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td></td>	1,1-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
Ethylbenzene 2.0 10.0 ND	cis-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
Hexachlorobutadiene	trans-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
2-Hexanone 25 50 ND	Ethylbenzene	2.0	10.0	ND	ND	ND	ND	
Isopropylbenzene	Hexachlorobutadiene	15	30	ND	ND	ND	ND	
p-Isopropyltoluene 5.0 10.0 ND	2-Hexanone	25	50	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK) 25 50 ND ND ND ND ND Methyl-tert-butyl ether (MTBE) 5.0 10.0 ND ND ND ND ND Methylene chloride (DCM) 25 50 ND ND ND ND ND Naphthalene 5.0 10.0 ND ND ND ND ND n-Propylbenzene 5.0 10.0 ND ND ND ND ND Styrene 5.0 10.0 ND ND ND ND ND 1,1,1,2-Tetrachloroethane 5.0 10.0 ND ND ND ND ND	Isopropylbenzene	5.0	10.0	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE) 5.0 10.0 ND ND ND ND Methylene chloride (DCM) 25 50 ND	p-Isopropyltoluene	5.0	10.0	ND	ND	ND	ND	
Methylene chloride (DCM) 25 50 ND N	4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	
Naphthalene 5.0 10.0 ND ND ND ND n-Propylbenzene 5.0 10.0 ND ND ND ND Styrene 5.0 10.0 ND ND ND ND 1,1,2-Tetrachloroethane 5.0 10.0 ND ND ND ND	Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	ND	ND	ND	
n-Propylbenzene 5.0 10.0 ND ND ND ND Styrene 5.0 10.0 ND ND ND ND 1,1,1,2-Tetrachloroethane 5.0 10.0 ND ND ND ND	Methylene chloride (DCM)	25	50	ND	ND	ND	ND	
Styrene 5.0 10.0 ND ND ND ND 1,1,2-Tetrachloroethane 5.0 10.0 ND ND ND ND	Naphthalene	5.0	10.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane 5.0 10.0 ND ND ND ND	n-Propylbenzene	5.0	10.0	ND	ND	ND	ND	
	Styrene	5.0	10.0	ND	ND	ND	ND	
1 1 2 2 Tetrachlorouthone 5 0 10 0 ND ND ND ND ND	1,1,1,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	
1,1,4,4-1 Cu a Chi loro Cui and ND ND ND ND	1,1,2,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	
Tetrachloroethene 0.5 1.0 ND ND ND ND	Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene) 2.0 10.0 ND ND ND ND	Toluene (Methyl benzene)	2.0	10.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene 5.0 10.0 ND ND ND ND	1,2,3-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene 5.0 10.0 ND ND ND ND	1,2,4-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,1,1-Trichloroethane 5.0 10.0 ND ND ND ND	1,1,1-Trichloroethane	5.0	10.0	ND	ND	ND	ND	
1,1,2-Trichloroethane 5.0 10.0 ND ND ND ND	1,1,2-Trichloroethane	5.0	10.0	ND	ND	ND	ND	
Trichloroethene 0.5 1.0 ND ND ND ND	Trichloroethene	0.5	1.0	ND	ND	ND	ND	
Trichlorofluoromethane 5.0 10.0 ND ND ND ND	Trichlorofluoromethane	5.0	10.0	ND	ND	ND	ND	
1,2,3-Trichloropropane 5.0 10.0 ND ND ND ND	1,2,3-Trichloropropane	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45787
 01/24/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012508

Our Lab I.D.			Method Blank	45787.05	45787.09	45787.11	
Client Sample I.D.				ST5-10	NT3-10	Field Dup 4	
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
Vinyl Acetate	25	50	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	15	30	ND	ND	ND	ND	
o-Xylene	2.0	10.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	20.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	45787.05	45787.09	45787.11	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		85.8	83.0	79.0	85.0	
Dibromofluoromethane	75-125		101	103	103	104	
Toluene-d8	75-125		86.1	78.0	78.0	77.0	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

 AETL Job Number
 Submitted
 Client

 45787
 01/24/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 013008

Our Lab I.D.		Method Blank	45787.12	45787.13	45787.14		
Client Sample I.D.			Trip Blank	ST4-GW	NT3-GW		
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared		01/30/2008	01/30/2008	01/30/2008	01/30/2008		
Preparation Method	Preparation Method			5030B	5030B	5030B	
Date Analyzed			01/30/2008	01/30/2008	01/30/2008	01/30/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units	ts			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	10	10	ND	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45787
 01/24/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) $\,$ QC Batch No: 013008 $\,$

Our Lab I.D.			Method Blank	45787.12	45787.13	45787.14	
Client Sample I.D.			Trip Blank	ST4-GW	NT3-GW		
Date Sampled			01/22/2008	01/22/2008	01/22/2008		
Date Prepared		01/30/2008	01/30/2008	01/30/2008	01/30/2008		
Preparation Method		5030B	5030B	5030B	5030B		
Date Analyzed	Date Analyzed			01/30/2008	01/30/2008	01/30/2008	
Matrix	Matrix			Aqueous	Aqueous	Aqueous	
Units	Inits			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	1.40	1.70	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45787
 01/24/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 013008

Our Lab I.D.			Method Blank	45787.12	45787.13	45787.14	
Client Sample I.D.			Trip Blank	ST4-GW	NT3-GW		
Date Sampled	Date Sampled				01/22/2008	01/22/2008	
Date Prepared			01/30/2008	01/30/2008	01/30/2008 01/30/2008		
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			01/30/2008	01/30/2008	01/30/2008	01/30/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	45787.12	45787.13	45787.14	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		111	120	114	118	
Dibromofluoromethane	75-125		101	101	102	103	
Toluene-d8	75-125		106	103	102	107	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
45787	01/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 013008; Dup or Spiked Sample: BL013008; LCS: Clean Water; QC Prepared: 01/30/2008; QC Analyzed: 01/30/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	41.65	83.3	50.00	42.80	85.6	2.7	75-125	<20
Chlorobenzene	0.0	50.00	45.45	90.9	50.00	45.70	91.4	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	45.10	90.2	50.00	45.35	90.7	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	46.85	93.7	50.00	48.20	96.4	2.8	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	43.65	87.3	50.00	43.50	87.0	<1	75-125	<20
Trichloroethene	0.0	50.00	42.95	85.9	50.00	52.50	105	20.0	75-125	<20

QC Batch No: 013008; Dup or Spiked Sample: BL013008; LCS: Clean Water; QC Prepared: 01/30/2008; QC Analyzed: 01/30/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	41.55	83.1	75-125			
Chlorobenzene	50.00	44.45	88.9	75-125			
1,1-Dichloroethene	50.00	46.05	92.1	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	46.00	92.0	75-125			
Toluene (Methyl benzene)	50.00	42.50	85.0	75-125			
Trichloroethene	50.00	43.90	87.8	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	45.50	91.0	75-125			
Ethylbenzene	50.00	46.05	92.1	75-125			
1,1,1-Trichloroethane	50.00	46.50	93.0	75-125			
o-Xylene	50.00	46.85	93.7	75-125			
m,p-Xylenes	100.00	92.90	92.9	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 9

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
45787	01/24/2008	T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 012508; Dup or Spiked Sample: BA012508; LCS: Clean Sand; QC Prepared: 01/25/2008; QC Analyzed: 01/25/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	56.50	113	50.00	59.50	119	5.2	75-125	<20
Chlorobenzene	0.0	50.00	47.35	94.7	50.00	48.15	96.3	1.7	75-125	<20
1,1-Dichloroethene	0.0	50.00	49.45	98.9	50.00	53.00	106	6.9	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	51.00	102	50.00	51.00	102	<1	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	46.80	93.6	50.00	47.85	95.7	2.2	75-125	<20
Trichloroethene	0.0	50.00	54.00	108	50.00	55.50	111	2.7	75-125	<20

QC Batch No: 012508; Dup or Spiked Sample: BA012508; LCS: Clean Sand; QC Prepared: 01/25/2008; QC Analyzed: 01/25/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	58.50	117	75-125			
Chlorobenzene	50.00	48.70	97.4	75-125			
1,1-Dichloroethene	50.00	52.00	104	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	49.75	99.5	75-125			
Toluene (Methyl benzene)	50.00	49.20	98.4	75-125			
Trichloroethene	50.00	55.00	110	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	46.25	92.5	75-125			
Ethylbenzene	50.00	46.00	92.0	75-125			
1,1,1-Trichloroethane	50.00	42.85	85.7	75-125			
o-Xylene	50.00	47.30	94.6	75-125			
m,p-Xylenes	100.00	95.40	95.4	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

4213 State Street Suite 100 Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 5

02/13/2008 Date Received Date Reported 02/22/2008

Job Number	Order Date	Client
45994	02/13/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 3 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director



2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

No 52283

TEST INSTRUCTIONS & COMMENTS **را** اة QAIQC - MS/ms D က် က HITTE: Page _ RELINQUISHED BY: 13/08 RECEIVED BY LABORATORY Printed Name: rinted Nam Signature: Signature તં Time: Ime: 4697 ANALYSIS REQUESTED RELINQUISHED BY RECEIVED BY: Printed Name Printed Nan Signature: Signature: AETL JOB No. Printed Name: Brian Do ^{_ime:} /300 <u> 10(5</u> 5W8260B RELINGUISHED BY SAMPLER: BRYAN DOW グンプ MULT. MULT Date: 4/12/08 MULT MUCT, アンプト PRES. Elliot RECEIVED BY: 2 HC. MANAGEN James Ell PHONE 805-681 -3100 21384-02 rinted Name: 4213 State St. Ste 100 Santa Bachara, CA 93110 FAX 805-681-3103 Signature: Signature: CONTAINER NUMBER/SIZE 8743 d ☐ 2 DAYS ☐ 3 DAYS 3 \supset PROJECT # PROJECT MANAGER SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX 8 0 PROPERLY COOLED Y/N/NA > 3 3 SAMPLES INTACT Y/ N / NA SAMPLES ACCEPTED Y/N SAME DAY NEXT DAY 0930 0850 0825 0500 0830 0840 0935 of 20 975 077 TIME 1025 Lemoore NAS Sik 14 **TURN AROUND TIME** 212/08 2/12/08 21208 05 12/08 DATE STREAMS TO 65 5 RUSH D. 46694 Tetra Tech 4692.04 20.4669H MU 45994·M 46934.08 4694103 4594.05 46994.06 459× .01 18821.6 269410 469412 2522 13 76667 LAB ID ニッドのプ TOTAL NUMBER OF CONTAINERS RECEIVED IN GOOD COND. Y/N CUSTODY SEALS Y / N / NA NT2-100 NT6-10 NORMAL SAMPLE ID 9 t - 2 J 1 PROJECT NAME ا ا SITE NAME COMPANY ADDRESS FZ X

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator



2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181

Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

No 52284

TEST INSTRUCTIONS & COMMENTS Page 2 of 2 9:0 က Time: RELINQUISHED BY: RECEIVED BY Printed Name તાં Time Time: AETL JOB NO. 45 994 **ANALYSIS REQUESTED** RELINQUISHED BY RECEIVED BY: Printed Name rinted Name Signature: 300 Printed Name: Brach RELINQUISHED BY SAMPLER: James Ellist 805681-3100 85681-3103 Date: 2/12/08 MUT. PRES. 21384-02 rinted Nam Signature: CONTAINER NUMBER/SIZE コ ☐ 2 DAYS ☐ 3 DAYS SAMPLE RECEIPT - TO BE FILLED BY LABORATORY PROJECT MANAGER PHONE MATRIX # 0 4213 State St Ste 100 Santa Bachara, CA 93110 FAX PROJECT NAME PROPERLY COOLED Y/N/NA SAMPLES INTACT Y/ N / NA SAMPLES ACCEPTED Y/N SAME DAY NEXT DAY TIME 0800 NAS SIR 14 **TURN AROUND TIME** 2112 108 DATE STREAMS TO 65 RUSH 1637-16 Chy oore LAB ID RECEIVED IN GOOD COND. Y/N TOTAL NUMBER OF CONTAINERS CUSTODY SEALS Y/N/NA COMPANY ADDRESS NORMAL SAMPLE ID SITE NAME ADDRESS COMPANY X

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page:

T21384-02 Project ID: Project Name: Streams TO-65 Site 14 Lemoore NAS

Site

AETL Job Number Submitted Client 45994 02/13/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 021408IA1

Our Lab I.D.			Method Blank	45994.01	45994.02	45994.11	
Client Sample I.D.				TB-3	NT1-GW	NT6-GW	
Date Sampled				02/12/2008	02/12/2008	02/12/2008	
Date Prepared			02/13/2008	02/13/2008	02/13/2008	02/13/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			02/13/2008	02/14/2008	02/14/2008	02/14/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	10	10	ND	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	0.670J	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45994
 02/13/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 021408IA1

Our Lab I.D.			Method Blank	45994.01	45994.02	45994.11	
Client Sample I.D.				TB-3	NT1-GW	NT6-GW	
Date Sampled				02/12/2008	02/12/2008	02/12/2008	
Date Prepared			02/13/2008	02/13/2008	02/13/2008	02/13/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			02/13/2008	02/14/2008	02/14/2008	02/14/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	24.7	ND	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45994
 02/13/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 021408IA1

Our Lab I.D.			Method Blank	45994.01	45994.02	45994.11	
Client Sample I.D.				TB-3	NT1-GW	NT6-GW	
Date Sampled				02/12/2008	02/12/2008	02/12/2008	
Date Prepared			02/13/2008	02/13/2008	02/13/2008	02/13/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			02/13/2008	02/14/2008	02/14/2008	02/14/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	45994.01	45994.02	45994.11	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		120	112	113	111	
Dibromofluoromethane	75-125		101	101	101	99.1	
Toluene-d8	75-125		112	111	112	111	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

 AETL Job Number
 Submitted
 Client

 45994
 02/13/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 021408IA1; Dup or Spiked Sample: B021408IA1; LCS: Clean Water; QC Prepared: 02/13/2008; QC Analyzed: 02/14/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	49.80	99.6	50.00	50.00	100	<1	75-125	<20
Chlorobenzene	0.0	50.00	49.10	98.2	50.00	49.40	98.8	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	50.00	100	50.00	52.50	105	4.88	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	49.80	99.6	50.00	50.50	101	1.40	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	50.00	100	50.00	50.50	101	<1	75-125	<20
Trichloroethene	0.0	50.00	46.30	92.6	50.00	48.90	97.8	5.46	75-125	<20

QC Batch No: 021408IA1; Dup or Spiked Sample: B021408IA1; LCS: Clean Water; QC Prepared: 02/13/2008; QC Analyzed: 02/14/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	50.60	101	75-125			
Chlorobenzene	50.00	48.80	97.6	75-125			
1,1-Dichloroethene	50.00	52.40	105	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	48.50	97.0	75-125			
Toluene (Methyl benzene)	50.00	50.70	101	75-125			
Trichloroethene	50.00	50.40	101	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	46.20	92.4	75-125			
Ethylbenzene	50.00	49.00	98.0	75-125			
1,1,1-Trichloroethane	50.00	42.90	85.8	75-125			
o-Xylene	50.00	48.90	97.8	75-125			
m,p-Xylenes	100.00	100.00	100	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

4213 State Street Suite 100 Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 5

02/13/2008 Date Received Date Reported 02/21/2008

Job Number	Order Date	Client
45995	02/13/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 3 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director



2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

Nº 52133

45995

TEST INSTRUCTIONS & COMMENTS great Ime: 70/5 က line: 13/03 RELINQUISHED BY: RECEIVED BY Printed Narg Signature: Time: Time: **ANALYSIS REQUESTED** RELINQUISHED BY RECEIVED BY: Printed Name rinted Nam Signature AETL JOB No. 300 Printed Name Brian Dow SWEZEOR VOCS RELINQUISHED BY SAMPLER: PROJECT MANAGER Jaymes Elliot PHONE 805-681-3100 Date: 2/12/08 RECEIVED BY: MULT. PRES. HC H Ξ 805-681-3103 21384-02 rinted Nan Signature: Signature: CONTAINER NUMBER/SIZE h b 丁 2 DAYS PROJECT # SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX 4213 State St. Ste. 100 South Barbara, CA93110 FAX PROJECT NAME <u>Ф</u> 4 Y/N/NA 3 3 Y/K/NA SAMPLES ACCEPTED Y N SAME DAY 1420 410 0800 0400 1520 27 009 425 PROPERLY COOLED TIME 110 605 SAMPLES INTACT TURN AROUND TIME 2/11/28 DATE Site 7 RUSH 71.66.5h 45995.02 45995.03 45995.08 45795-07 45995-04 45995.05 45995.06 64.53.65 h 45995.10 11.5663H Le moore 0.36654 LAB ID STREAMS TO 65 Tetra Tech OTAL NUMBER OF CONTAINERS RECEIVED IN GOOD COND. Y N CUSTODY SEALS Y/N(NA) 5T2-CW STI-GW COMPANY ADDRESS NORMAL SAMPLE ID 0 -7 SITE NAME COMPANY ADDRESS X

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page:

T21384-02 Project ID: Project Name: Streams TO-65 Site 14 Lemoore NAS

Site

AETL Job Number Submitted Client 45995 02/13/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 021408IA1

Our Lab I.D.			Method Blank	45995.01	45995.02	45995.03	
Client Sample I.D.				TB-2	ST1-GW	ST2-GW	
Date Sampled				02/11/2008	02/11/2008	02/11/2008	
Date Prepared			02/13/2008	02/13/2008	02/13/2008	02/13/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			02/13/2008	02/14/2008	02/14/2008	02/14/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	10	10	ND	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	2.40	1.02	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45995
 02/13/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 021408IA1

Our Lab I.D.			Method Blank	45995.01	45995.02	45995.03	
Client Sample I.D.				TB-2	ST1-GW	ST2-GW	
Date Sampled				02/11/2008	02/11/2008	02/11/2008	
Date Prepared			02/13/2008	02/13/2008	02/13/2008	02/13/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			02/13/2008	02/14/2008	02/14/2008	02/14/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	0.890J	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	4.20	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	1.79	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	1.36	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	240	30.4	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 45995
 02/13/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 021408IA1

Our Lab I.D.			Method Blank	45995.01	45995.02	45995.03	
Client Sample I.D.				TB-2	ST1-GW	ST2-GW	
Date Sampled				02/11/2008	02/11/2008	02/11/2008	
Date Prepared			02/13/2008	02/13/2008	02/13/2008	02/13/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			02/13/2008	02/14/2008	02/14/2008	02/14/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	45995.01	45995.02	45995.03	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		120	112	115	114	
Dibromofluoromethane	75-125		101	99.8	99.8	101	
Toluene-d8	75-125		112	111	113	112	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
45995	02/13/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 021408IA1; Dup or Spiked Sample: B021408IA1; LCS: Clean Water; QC Prepared: 02/13/2008; QC Analyzed: 02/14/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	49.80	99.6	50.00	50.00	100	<1	75-125	<20
Chlorobenzene	0.0	50.00	49.10	98.2	50.00	49.40	98.8	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	50.00	100	50.00	52.50	105	4.88	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	49.80	99.6	50.00	50.50	101	1.40	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	50.00	100	50.00	50.50	101	<1	75-125	<20
Trichloroethene	0.0	50.00	46.30	92.6	50.00	48.90	97.8	5.46	75-125	<20

QC Batch No: 021408IA1; Dup or Spiked Sample: B021408IA1; LCS: Clean Water; QC Prepared: 02/13/2008; QC Analyzed: 02/14/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	50.60	101	75-125			
Chlorobenzene	50.00	48.80	97.6	75-125			
1,1-Dichloroethene	50.00	52.40	105	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	48.50	97.0	75-125			
Toluene (Methyl benzene)	50.00	50.70	101	75-125			
Trichloroethene	50.00	50.40	101	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	46.20	92.4	75-125			
Ethylbenzene	50.00	49.00	98.0	75-125			
1,1,1-Trichloroethane	50.00	42.90	85.8	75-125			
o-Xylene	50.00	48.90	97.8	75-125			
m,p-Xylenes	100.00	100.00	100	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

4213 State Street Suite 100 Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 5

02/14/2008 Date Received Date Reported 02/21/2008

Job Number	Order Date	Client
46019	02/14/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 2 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

SHIPPED TO: AETL

Burbank, CA 91504

2834 -12908 N. Nasmi St. 46019 CHAIN OF CUSTODY RECORD

DATE 2/12/08

SITE Lemoore NAS

PAGE OF

TURN-AROUND TIME:	Standard	OBSERVATIONS/COMMENTS:	Siens	nistnoC		Мит	3 46019.01	2 46019.02	4 46019.03	4 46019.04	4 46019.05	4 46019.06	4 46019.03	4 46019.03	4 16019.09	.4 46019.10	TEMPERATURE BLANK EACH COOLER: YES (NO)	FOTAL NUMBER OF CONTAINERS 5 7	METHOD OF SHIPMENT	SPECIAL SHIPMENT/HANDLING/STORAGE C REQUIREMENTS:	9
S					٤	QPCF A,	9M	<u>→</u>	X	X	X	×	×	X	X	↑ <u>↑</u> X	PRESERVATIVES: All samples are preserved at 4° C. Water samples are preserved as indicated on the sample labels.	DATE: TIME: 0935	DATE: TIME: 7-14-05 0840	DATE: 1210	DATE: TIME: 1210
ANALYTICAL METHODS	SQ	M 7 FM 7 T T 160.1 T C	7471 C VI ALK /	OCs 470 / 7 310.1 310.1 9	20 SUNG 20 SIN 20 SIN 20 SIN 20 SIN	326.2 E360 E360 E248. SW60 SW82 SW82												TETRA TECH, INC.	COMPANY:	COMPANY: AETC	COMPANY:
	70 65	O nodis		O \ ləse		2M80	X 0091 89/21/2	X 0080 1	1505	1515	1520	0151	1320	1315	1325	1330	CONTAINER G = Glass TYPE: SS = Stainless Steel P = Plastic	Cash	S Land	us felin	1000
CLIENT EPA	Streams	-02	SAMPLERS (Signatures)	× Chi Croly	×	SAMPLE ID		- 4	''	2-715	576-10	4-878	W75-4	NT5-2	NT5-7	NTS-10	MATRIX S = Soil CO TYPE: W = Water TYI	RELINQUISHED BY: SIGNATURE:	RECEIVED BY: SIGNATURE:	7	SIGNATURE:



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: T21384-02
Project Name: Streams TO-65

Site 14 Lemoore NAS

Site

 AETL Job Number
 Submitted
 Client

 46019
 02/14/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0215081A1

Our Lab I.D.			Method Blank	46019.01	46019.02	
Client Sample I.D.				ST6-GW	Trip Blank 1	
Date Sampled				02/12/2008	02/12/2008	
Date Prepared			02/15/2008	02/15/2008	02/15/2008	
Preparation Method			5030B	5030B	5030B	
Date Analyzed			02/15/2008	02/15/2008	02/15/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
Acetone	10	10	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46019
 02/14/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0215081A1

Our Lab I.D.			Method Blank	46019.01	46019.02	
Client Sample I.D.				ST6-GW	Trip Blank 1	
Date Sampled				02/12/2008	02/12/2008	
Date Prepared			02/15/2008	02/15/2008	02/15/2008	
Preparation Method			5030B	5030B	5030В	
Date Analyzed			02/15/2008	02/15/2008	02/15/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	ND	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46019
 02/14/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0215081A1

Our Lab I.D.			Method Blank	46019.01	46019.02	
Client Sample I.D.				ST6-GW	Trip Blank 1	
Date Sampled				02/12/2008	02/12/2008	
Date Prepared		02/15/2008	02/15/2008	02/15/2008		
Preparation Method			5030B	5030B	5030B	
Date Analyzed			02/15/2008	02/15/2008	02/15/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	
Our Lab I.D.			Method Blank	46019.01	46019.02	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		122	121	117	
Dibromofluoromethane	75-125		101	99.4	101	
Toluene-d8	75-125		110	115	112	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 4213 State Street

Suite 100

Santa Barbara, CA 93110-2847

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

 AETL Job Number
 Submitted
 Client

 46019
 02/14/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0215081A1; Dup or Spiked Sample: B0215081A1; LCS: Clean Water; QC Prepared: 02/14/2008; QC Analyzed: 02/15/2008; Units: ppb

	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD	
Analytes	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit	
Benzene	50.00	48.40	96.8	50.00	47.50	95.0	1.88	75-125	<20	
Chlorobenzene	50.00	44.80	89.6	50.00	44.80	89.6	<1	75-125	<20	
1,1-Dichloroethene	50.00	45.80	91.6	50.00	44.50	89.0	2.88	75-125	<20	
Methyl-tert-butyl ether (MTBE)	50.00	45.10	90.2	50.00	48.00	96.0	6.23	75-125	<20	
Toluene (Methyl benzene)	50.00	45.80	91.6	50.00	46.50	93.0	1.52	75-125	<20	
Trichloroethene	50.00	44.00	88.0	50.00	48.60	97.2	9.94	75-125	<20	

QC Batch No: 0215081A1; Dup or Spiked Sample: B0215081A1; LCS: Clean Water; QC Prepared: 02/14/2008; QC Analyzed: 02/15/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	48.60	97.2	75-125			
Chlorobenzene	50.00	45.80	91.6	75-125			
1,1-Dichloroethene	50.00	49.70	99.4	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	51.50	103	75-125			
Toluene (Methyl benzene)	50.00	47.40	94.8	75-125			
Trichloroethene	50.00	43.70	87.4	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	44.90	89.8	75-125			
Ethylbenzene	50.00	43.60	87.2	75-125			
1,1,1-Trichloroethane	50.00	40.30	80.6	75-125			
o-Xylene	50.00	45.60	91.2	75-125			
m,p-Xylenes	100.00	89.90	89.9	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 8

02/13/2008 Date Received Date Reported 03/18/2008

Job Number	Order Date	Client
46300	03/06/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 8 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

of Soil Meland: 03/06/08

American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Due dato: 03/13/08 640800,

CHAIN OF CUSTODY RECORD

48300

No 52283

TEST INSTRUCTIONS & COMMENTS - MS/mS > က် က Time: 4630006 46300.04 46300.23 763000 16300 CE 46300.ch 0.00834 RELINQUISHED BY: X0/2/9m RECEIVED BY LABORATORY QA/BC Printed Name: 46300.CV Time: ANALYSIS REQUESTED RELINQUISHED BY: RECEIVED BY: Printed Name rinted Name Signature: AETL JOB No. Printed Name: Brian Do VOC 5 RELINQUISHED BY SAMPLER: BOJAN D Date: 2/12 /08 アンレス MULT MULT mul T PRES. PHONE 805-681-3100 #CI Printed Name: 21384-02 4213 State St. Ste 100 Santa Barbara, CA 93110 FAX 805- 681-3103 CONTAINER NUMBER/SIZE 8743 2 DAYS 7 PROJECT # PROJECT MANAGER SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX 8 PROPERLY COOLED Y/N/NA 33 SAMPLES INTACT Y/ N / NA SAMPLES ACCEPTED Y/N SAME DAY NEXT DAY 0050 0935 0850 0825 0930 0830 2775 0840 130 920 IME 212 108 1135 Lemobre NAS SIK 14 TURN AROUND TIME 2/12/08 2/12/08 DATE STREAMS TO 65 RUSH D: 16691 NT6-10- 16924-16 Tetra Tech 1692.02 16994.05 46994.08 Zo. 1669H 4694 ·01 45984·07 4694.12 4694.03 46374.06 01.1882 1694 13 16991 LAB 1D = 166% RECEIVED IN GOOD COND. Y/N TOTAL NUMBER OF CONTAINERS CUSTODY SEALS Y/N/NA COMPANY ADDRESS NORMAL X SAMPLE ID 9 SITE NAME AND ADDRESS COMPANY

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

Y Soil Mchard: 03/06/08 American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Due dato: 03/13/08 6y0800

CHAIN OF CUSTODY RECORD

N: 52283

26.94

TEST INSTRUCTIONS & COMMENTS 4 QAIQC - MS/ms D ઌ૽ ઌ૽ 4620006 46300.09 46300.23 46300.04 163000E RELINQUISHED BY: 46300.0 16300.01 X0/2//3/0X RECEIVED BY LABORATORY: Printed Name Printed Name Signature: 1 m **⊘** \ 4630b.d Time: **ANALYSIS REQUESTED** RELINQUISHED BY: RECEIVED BY: ninted Name Printed Na AETL JOB No. Printed Name: Brian Do 1300 <u>10C2</u> RELINGUISHED BY SAMPLER: Brian Dow Riv MULT. アントナ Date: 2/12 /08
RECEIVED BY: MULT MWT. かいして、 James Elliot PHONE 805-681-3100 PRES. に 子 21384-02 4213 State St. Ste 100 Santa Rachara, CA 93110 FAX 805-681-3103 Printed Name Signature: CONTAINER NUMBER/SIZE 80 A 20 2 DAYS PROJECT # PROJECT MANAGER SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX **8** PROPERLY COOLED Y/N/NA X SAMPLES INTACT Y/ N / NA SAMPLES ACCEPTED Y/N SAME DAY NEXT DAY 0930 0830 00±0 0850 0840 0825 220 815 0935 920 TIME Lemoore NAS SIK 14 7 2 28 **TURN AROUND TIME** 2/12/08 08 2/12/08 OB DATE PROJECT NAME STREAMS TO 65 RUSH D. 4634 Tetra Tech 4532.04 46994.08 1694.03 4694.05 46394.06 Zo. 11669th 45984.04 9. 16691 7594.10 1698 - 12 46941.0 7.692.7 - K63/ LAB ID 16691 **FOTAL NUMBER OF CONTAINERS** RECEIVED IN GOOD COND. Y/N CUSTODY SEARS Y/N/NA NT6 - 10 NT2-100 NORMAL NORMAL SAMPLE ID 9 SITE NAME AND COMPANY ADDRESS

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

Jim Lin

From:

Elliot, James [James.ELLIOT@tetratech.com]

Sent:

Wednesday, March 05, 2008 8:05 PM

To:

JimL@aetlab.com

Cc:

Crosby, Chris

Subject: RE: Soil Samples from Lemoore NAS Site 14

Jim,

Please see corrections below - I found the AETL job number, and also that sample NT3-10 had already been run. sorry for any confusion

James

From: Elliot, James

Sent: Wednesday, March 05, 2008 6:49 PM

To: JimL@aetlab.com Cc: Crosby, Chris

Subject: Soil Samples from Lemoore NAS Site 14

Hi Jim,

Have received instructions from the client for analyzing some of the soil samples form the Lemoore site as follows. All samples to be analyzed for VOCs.

Samples collected 2/12/2008:

NT1-2 (45995.03)

NT1-4 (45995.04)

NT1-7 (45995.05)

NT1-10 (45995.06)

NT2-2 (45995.07)

NT2-4 (45995.08) NT2-7 (45995.09)

NT2-10Q (45995.10)

Samples collected 1/22/2008 (45787):

NT3-2

NT3-4

NT3-7

Let me know if you have any questions.

Thanks

James

R. James Elliot, P.G., C.Hg. | Principal Geologist Main: 805.681.3100, ext. 167 | Mobile: 805.895.5067 | Fax: 805.681.3108

james.elliot@tetratech.com

Tetra Tech | Santa Barbara

301 Mentor Drive, Suite A | Santa Barbara, CA 93111 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number Submitted Client 46300 02/13/2008 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 030708

Our Lab I.D.			Method Blank	46300.01	46300.02	46300.03	46300.04
Client Sample I.D.				NT1-2	NT1-4	NT1-7	NT1-10
Date Sampled				02/12/2008	02/12/2008	02/12/2008	02/12/2008
Date Prepared			03/07/2008	03/07/2008	03/07/2008	03/07/2008	03/07/2008
Preparation Method			5035A	5035A	5035A	5035A	5035A
Date Analyzed			03/07/2008	03/07/2008	03/07/2008 03/07/2008		03/07/2008
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	25	50	ND	ND	ND	ND	ND
Benzene	2.0	10.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	5.0	10.0	ND	ND	ND	ND	ND
Bromochloromethane	5.0	10.0	ND	ND	ND	ND	ND
Bromodichloromethane	5.0	10.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	25	50	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	15	30	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND
n-Butylbenzene	5.0	10.0	ND	ND	ND ND		ND
sec-Butylbenzene	5.0	10.0	ND	ND	ND	ND	ND
tert-Butylbenzene	5.0	10.0	ND	ND	ND	ND	ND
Carbon Disulfide	25	50	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	10.0	ND	ND	ND	ND	ND
Chlorobenzene	5.0	10.0	ND	ND	ND	ND	ND
Chloroethane	15	30	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	50	50	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	5.0	10.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	15	30	ND	ND	ND	ND	ND
2-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	ND
4-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	25	50	ND	ND	ND	ND	ND
Dibromochloromethane	5.0	10.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	5.0	10.0	ND	ND	ND	ND	ND
Dibromomethane	5.0	10.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46300
 02/13/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 030708

Our Lab I.D.			Method Blank	46300.01	46300.02	46300.03	46300.04
Client Sample I.D.		NT1-2	NT1-4	NT1-7	NT1-10		
Date Sampled				02/12/2008	02/12/2008	02/12/2008	02/12/2008
Date Prepared			03/07/2008	03/07/2008	03/07/2008	03/07/2008	03/07/2008
Preparation Method			5035A	5035A	5035A	5035A	5035A
Date Analyzed			03/07/2008	03/07/2008	03/07/2008	03/07/2008	03/07/2008
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	15	30	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	10.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	5.0	10.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	10.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	5.0	10.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	5.0	10.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	ND
Ethylbenzene	2.0	10.0	ND	ND ND		ND	ND
Hexachlorobutadiene	15	30	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND
Isopropylbenzene	5.0	10.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	5.0	10.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	25	50	ND	ND	ND	ND	ND
Naphthalene	5.0	10.0	ND	ND	ND	ND	ND
n-Propylbenzene	5.0	10.0	ND	ND	ND	ND	ND
Styrene	5.0	10.0	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	2.0	10.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	10.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5.0	10.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	1.80	15.9	18.7	10.4
Trichlorofluoromethane			ND	ND ND		ND	ND
1,2,3-Trichloropropane	5.0	10.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46300
 02/13/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 030708

Our Lab I.D.			Method Blank	46300.01	46300.02	46300.03	46300.04
Client Sample I.D.				NT1-2	NT1-4	NT1-7	NT1-10
Date Sampled				02/12/2008	02/12/2008	02/12/2008	02/12/2008
Date Prepared			03/07/2008	03/07/2008	03/07/2008	03/07/2008	03/07/2008
Preparation Method			5035A	5035A	5035A	5035A	5035A
Date Analyzed		03/07/2008	03/07/2008	03/07/2008	03/07/2008	03/07/2008	
Matrix		Soil	Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	ND
Vinyl Acetate	25	50	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	15	30	ND	ND	ND	ND	ND
o-Xylene	2.0	10.0	ND	ND	ND	ND	ND
m,p-Xylenes	2.0	20.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	46300.01	46300.02	46300.03	46300.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		87.8	84.9	83.8	84.9	85.0
Dibromofluoromethane	75-125		99.5	107	107	117	111
Toluene-d8	75-125		77.4	78.6	81.0	81.0	84.6



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46300	02/13/2008	T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 030708

Our Lab I.D.			46300.05	46300.06	46300.07	46300.08	
Client Sample I.D.			NT2-2	NT2-4	NT2-7	NT2-10Q	
Date Sampled			02/12/2008	02/12/2008	02/12/2008	02/12/2008	
Date Prepared			03/07/2008	03/07/2008	03/07/2008	03/07/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed					03/07/2008	03/07/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor	actor		1	1	1	1	
Analytes	MDL		Results	Results	Results	Results	
Acetone	25	50	ND	ND	ND	ND	
Benzene	2.0	10.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	5.0	10.0	ND	ND	ND	ND	
Bromochloromethane	5.0	10.0	ND	ND	ND	ND	
Bromodichloromethane	5.0	10.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	25	50	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	15	30	ND	ND	ND	ND	
2-Butanone (MEK)	25	50	ND	ND	ND	ND	
n-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
sec-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
tert-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
Carbon Disulfide	25	50	ND	ND	ND	ND	
Carbon tetrachloride	5.0	10.0	ND	ND	ND	ND	
Chlorobenzene	5.0	10.0	ND	ND	ND	ND	
Chloroethane	15	30	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	50	50	ND	ND	ND	ND	
Chloroform (Trichloromethane)	5.0	10.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	15	30	ND	ND	ND	ND	
2-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
4-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	25	50	ND	ND	ND	ND	
Dibromochloromethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	5.0	10.0	ND	ND	ND	ND	
Dibromomethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46300
 02/13/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 030708

Our Lab I.D.			46300.05	46300.06	46300.07	46300.08	
Client Sample I.D.			NT2-2	NT2-4	NT2-7	NT2-10Q	
Date Sampled			02/12/2008	02/12/2008	02/12/2008	02/12/2008	
Date Prepared			03/07/2008	03/07/2008	03/07/2008	03/07/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			03/07/2008	03/07/2008		03/07/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	15	30	ND	ND	ND	ND	
1,1-Dichloroethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dichloroethane (EDC)	5.0	10.0	ND	ND	ND	ND	
1,1-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
1,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
1,3-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
2,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
1,1-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
Ethylbenzene	2.0	10.0	ND	ND	ND	ND	
Hexachlorobutadiene	15	30	ND	ND	ND	ND	
2-Hexanone	25	50	ND	ND	ND	ND	
Isopropylbenzene	5.0	10.0	ND	ND	ND	ND	
p-Isopropyltoluene	5.0	10.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	ND	ND	ND	
Methylene chloride (DCM)	25	50	ND	ND	ND	ND	
Naphthalene	5.0	10.0	ND	ND	ND	ND	
n-Propylbenzene	5.0	10.0	ND	ND	ND	ND	
Styrene	5.0	10.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene)	2.0	10.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	5.0	10.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	5.0	10.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	1.20	1.30	
Trichlorofluoromethane	5.0	10.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46300
 02/13/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 030708

Our Lab I.D.			46300.05	46300.06	46300.07	46300.08	
Client Sample I.D.			NT2-2	NT2-4	NT2-7	NT2-10Q	
Date Sampled			02/12/2008	02/12/2008	02/12/2008	02/12/2008	
Date Prepared			03/07/2008	03/07/2008	03/07/2008	03/07/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			03/07/2008	03/07/2008	03/07/2008	03/07/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
Vinyl Acetate	25	50	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	15	30	ND	ND	ND	ND	
o-Xylene	2.0	10.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	20.0	ND	ND	ND	ND	
Our Lab I.D.			46300.05	46300.06	46300.07	46300.08	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		84.0	86.0	85.0	84.0	
Dibromofluoromethane	75-125		111	114	115	115	
Toluene-d8	75-125		77.0	88.0	82.0	80.0	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46300	02/13/2008	T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 030708; Dup or Spiked Sample: B030708; LCS: Clean Sand; QC Prepared: 03/07/2008; QC Analyzed: 03/07/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	59.50	119	50.00	59.50	119	<1	75-125	<20
Chlorobenzene	0.0	50.00	46.25	92.5	50.00	47.50	95.0	2.7	75-125	<20
1,1-Dichloroethene	0.0	50.00	56.00	112	50.00	53.50	107	4.6	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	52.50	105	50.00	57.50	115	9.1	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	44.70	89.4	50.00	46.55	93.1	4.1	75-125	<20
Trichloroethene	0.0	50.00	56.50	113	50.00	56.00	112	<1	75-125	<20

QC Batch No: 030708; Dup or Spiked Sample: B030708; LCS: Clean Sand; QC Prepared: 03/07/2008; QC Analyzed: 03/07/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	60.00	120	75-125			
Chlorobenzene	50.00	46.85	93.7	75-125			
1,1-Dichloroethene	50.00	51.50	103	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	57.00	114	75-125			
Toluene (Methyl benzene)	50.00	46.65	93.3	75-125			
Trichloroethene	50.00	58.00	116	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	49.70	99.4	75-125			
Ethylbenzene	50.00	46.00	92.0	75-125			
1,1,1-Trichloroethane	50.00	47.85	95.7	75-125			
o-Xylene	50.00	46.65	93.3	75-125			
m,p-Xylenes	100.00	92.40	92.4	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attention: James Elliot

Number of Pages 5

01/24/2008 Date Received Date Reported 03/12/2008

Job Number	Order Date	Client
46303	03/06/2008	T/TSB

Project ID: T21384-02 Project Name: Streams TO-65

Site: Site 14 Lemoore NAS

> Enclosed please find results of analyses of 3 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By: C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

TETRA TECH, INC. 4213 State Street, Suite 100 Santa Barbara, CA 93110 Phone (805) 681-3100 FAX (805) 681-3108

2834 N. Naoni St. SHIPPED TO: AET

45737 46303 CHAIN OF CUSTODY RECORD

SITE LEMOORE SIR 14 DATE 1/22/08 PAGE 1 OF 2 Bucbank, CA 91504

		٠.						<u> </u>			·		,			_					
TURN-AROUND TIME:	Standard	OBSERVATIONS/COMMENTS:		,	10.68431 7105	To-Ebtsh	45733.43	hortetsh	Gr.(16)	46303.01 45393.06	46303.02 -45733.03	46303.03 45737 B	15.18.cg	01.E872Y	TEMPERATURE BLANK	EACH COOLER: YES NO	TOTAL NUMBER OF CONTAINERS	METHOD OF SHIPMENT	Felson Concier	SPECIAĽ SHIPMENT/HANDLING/STORAĞE REQUIREMENTS:	
			eldme2 be	Filtere																	
		ers	er of Contain	dmuN	4	4	4	ų	h	4	Ч.	4	4	.4			ζ	اد	0		
			iner Type	Conta	5	S	4	6	Š	5	B	9	9	P		Water samples are preserved as indicated on the sample labels.	29.0		0740	7	\(\frac{1}{2} \)
			: Type	xinteM		2	2	S	5	\$	S	S	5	S		ple l	چ ښ)	8	 .ii	
			•													sarr	TIME	TIME		-IIME:	TIME
		(0	978):	ΛΘC						*	¥	¥				the					
																o pa	0	9	لہ	λ.	80
				A7J9												icat	-	<u>]</u> .	100	20/	TE 4 108
				OPCF	÷										ن	S in	 کین ر	DATE: 1	74	т 4	د نه
_w		Acids	G Metabolic A	ESMA											at 4°	ed 8	DATE:	苕	77	<u> </u>	DATE (//t
8	anaut	e, Ethane, E	osdfew XAƏ	0SMA											rved	esen					
ANALÝTICAL METHODS			apillus	3.975											PRESERVATIVES: All samples are preserved at 4° C.	e pr			ļ		ł
∑ L		20T N.	2 N-N / E415	E323 ⁻											PRESERVATIVES: All samples are pre	es ar	Ş]		ı
ర్డ్ [SOL	¥FK \ 160.1	CF'8/3101	E300											VAT les a	du	TETRA TECH, INC.	•			
7		· IV	muimondO a	E218,		ï		_							SEF	er Sa	TEC		1	3	
ξ	Metals	471 CAM17	r / 0747 / 010	09MS							-				PRE All si	Wate	Æ		A.	Mel	A 6
^		s	HA9 MIS 07	Z8MS													三	į.]		1
İ			SJO SAOC ²	Z8MS														Ā	ļ	Ž	ANY
			985 PCBs	SW80											teel			COMPANY:		COMPANY	COMPANY:
ľ		S	184 Pesticides	_									•		ss S			<u> </u>	\neg	<u> </u>	
ľ	Chain	раз / Сафоп	O \ leseiC Ct	28MS											ass ainle	읥					
Ì	re-		SOO AOC®	28MS	X	X	X	\supset		X	×	$\dot{\mathbf{x}}$	X	∇	G = Glass SS = Stainless Steel	P = Plastic	1				1
					Í	0	7	<u>,</u>			0	্ৰ	g	5	SS	4	_ \				ا آ سم
	lh			TIME	N	040	Sheo	09.50	0955	1315	1320	13.2	330	080	•		,	V			13
	3						0	0	Ó	=				2	ER		1	1	. \		
	₽∥	الد		DATE	200	2									IAIN :		,	1	1	Ĭ.	1 5
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7		ď	20102				`	-					CONTAINER TYPE:		_		B	7 4	3
	\$ = 1														О Г		ш́. У	Ď	1	i V	úi
_	REAMS	84-02	h														SIGNATURE:	SIGNATURE		TUR	SIGNATURE
9		. 깤						!									S C N	iGN/		Sign.	NO!
E PA	1 of H	12.0														- 1	<i>(</i>)	- S	4		<u>s</u>
	, 1,	│ ├ │ ॣ	'-	E ID								,			तै ater			ļ.	77.75		7
. >	. Y &	tures	.	SAMPLE ID				- 4	- 0	.1	ħ	-14-	- 12	2 9	S = Soil W = Water		1	⊅	À	~	à
7	YE ₩E	igna	A	SA	[]	, '	12	, 1	~	7	1	,	(ā	ω≩			\$,	<u>*</u>	
Ī	A A	S) S1			ז	[y c	, Ç	٧٢(3	Ç	کارل	Ç	١٠			星~	B	10		اکي نظ
ا ج	PROJECT NAME PROJECT MANAGER	TC# SAMPLERS (Signatures)			5-4-2	くすくこ		;	[4]	1	H			FIG	×	ı	RELINQUISHED BY:	RECEIVED BOLL	Charles France		<u>u</u> _2
CLIENT	Š Š	TC# SAMF	××			· V	, ע	, ,	5,	×	V	V	\	4	MATR! TYPE:			Ä	ð	RELIN	
- -															= -		_	, 6			

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

Jim Lin

From:

Elliot, James [James.ELLIOT@tetratech.com]

Sent:

Wednesday, March 05, 2008 8:05 PM

To:

JimL@aetlab.com

Cc:

Crosby, Chris

Subject: RE: Soil Samples from Lemoore NAS Site 14

Jim,

Please see corrections below - I found the AETL job number, and also that sample NT3-10 had already been run. sorry for any confusion

James

From: Elliot, James

Sent: Wednesday, March 05, 2008 6:49 PM

To: JimL@aetlab.com Cc: Crosby, Chris

Subject: Soil Samples from Lemoore NAS Site 14

Hi Jim,

Have received instructions from the client for analyzing some of the soil samples form the Lemoore site as follows. All samples to be analyzed for VOCs.

Samples collected 2/12/2008:

NT1-2 (45995.03)

NT1-4 (45995.04)

NT1-7 (45995.05)

NT1-10 (45995.06)

NT2-2 (45995.07)

NT2-4 (45995.08)

NT2-7 (45995.09)

NT2-10Q (45995.10)

Samples collected 1/22/2008 (45787):

NT3-2

NT3-4

NT3-7

Let me know if you have any questions.

Thanks

James

R. James Elliot, P.G., C.Hg. | Principal Geologist Main: 805.681.3100, ext. 167 | Mobile: 805.895.5067 | Fax: 805.681.3108

james.elliot@tetratech.com

Tetra Tech | Santa Barbara

301 Mentor Drive, Suite A | Santa Barbara, CA 93111 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **2**

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number Submitted Client
46303 01/24/2008 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012508

Our Lab I.D.			Method Blank	46303.01	46303.02	46303.03	
Client Sample I.D.				NT3-2	NT3-4	NT3-7	
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	25	50	ND	ND	ND	ND	
Benzene	2.0	10.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	5.0	10.0	ND	ND	ND	ND	
Bromochloromethane	5.0	10.0	ND	ND	ND	ND	
Bromodichloromethane	5.0	10.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	25	50	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	15	30	ND	ND	ND	ND	
2-Butanone (MEK)	25	50	ND	ND	ND	ND	
n-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
sec-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
tert-Butylbenzene	5.0	10.0	ND	ND	ND	ND	
Carbon Disulfide	25	50	ND	ND	ND	ND	
Carbon tetrachloride	5.0	10.0	ND	ND	ND	ND	
Chlorobenzene	5.0	10.0	ND	ND	ND	ND	
Chloroethane	15	30	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	50	50	ND	ND	ND	ND	
Chloroform (Trichloromethane)	5.0	10.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	15	30	ND	ND	ND	ND	
2-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
4-Chlorotoluene	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	25	50	ND	ND	ND	ND	
Dibromochloromethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	5.0	10.0	ND	ND	ND	ND	
Dibromomethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46303
 01/24/2008
 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 012508

Our Lab I.D.			Method Blank	46303.01	46303.02	46303.03	
Client Sample I.D.			NT3-2	NT3-4	NT3-7		
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared		01/25/2008	01/25/2008	01/25/2008	01/25/2008		
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	15	30	ND	ND	ND	ND	
1,1-Dichloroethane	5.0	10.0	ND	ND	ND	ND	
1,2-Dichloroethane (EDC)	5.0	10.0	ND	ND	ND	ND	
1,1-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	5.0	10.0	ND	ND	ND	ND	
1,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
1,3-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
2,2-Dichloropropane	5.0	10.0	ND	ND	ND	ND	
1,1-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	5.0	10.0	ND	ND	ND	ND	
Ethylbenzene	2.0	10.0	ND	ND	ND	ND	
Hexachlorobutadiene	15	30	ND	ND	ND	ND	
2-Hexanone	25	50	ND	ND	ND	ND	
Isopropylbenzene	5.0	10.0	ND	ND	ND	ND	
p-Isopropyltoluene	5.0	10.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	5.0	10.0	ND	ND	ND	ND	
Methylene chloride (DCM)	25	50	ND	ND	ND	ND	
Naphthalene	5.0	10.0	ND	ND	ND	ND	
n-Propylbenzene	5.0	10.0	ND	ND	ND	ND	
Styrene	5.0	10.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	5.0	10.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene)	2.0	10.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	5.0	10.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	5.0	10.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	5.0	10.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	5.0	10.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	5.0	10.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

 Project ID:
 T21384-02
 AETL Job Number
 Submitted
 Client

 Project Name:
 Streams T0-65
 46303
 01/24/2008
 T/TSB

Our Lab I.D.			Method Blank	46303.01	46303.02	46303.03	
Client Sample I.D.				NT3-2	NT3-4	NT3-7	
Date Sampled				01/22/2008	01/22/2008	01/22/2008	
Date Prepared			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Preparation Method			5035A	5035A	5035A	5035A	
Date Analyzed			01/25/2008	01/25/2008	01/25/2008	01/25/2008	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	5.0	10.0	ND	ND	ND	ND	
Vinyl Acetate	25	50	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	15	30	ND	ND	ND	ND	
o-Xylene	2.0	10.0	ND	ND	ND	ND	
m,p-Xylenes	2.0	20.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	46303.01	46303.02	46303.03	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		85.4	82.0	86.0	80.0	
Dibromofluoromethane	75-125		101	107	106	109	
Toluene-d8	75-125		86.1	79.0	78.0	79.0	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc.
301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02
Project Name: Streams T0-65

Site 14 Lemoore NAS

Site

AETL Job Number Submitted Client
46303 01/24/2008 T/TSB

Method: (8260B), Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 012508; Dup or Spiked Sample: BL012508; LCS: Clean Sand; QC Prepared: 01/25/2008; QC Analyzed: 01/25/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	56.50	113	50.00	59.50	119	5.2	75-125	<20
Chlorobenzene	0.0	50.00	47.35	94.7	50.00	48.15	96.3	1.7	75-125	<20
1,1-Dichloroethene	0.0	50.00	49.45	98.9	50.00	53.00	106	6.9	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	51.00	102	50.00	51.00	102	<1	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	46.80	93.6	50.00	47.85	95.7	2.2	75-125	<20
Trichloroethene	0.0	50.00	54.00	108	50.00	55.50	111	2.7	75-125	<20

QC Batch No: 012508; Dup or Spiked Sample: BL012508; LCS: Clean Sand; QC Prepared: 01/25/2008; QC Analyzed: 01/25/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	58.50	117	75-125			
Chlorobenzene	50.00	48.70	97.4	75-125			
1,1-Dichloroethene	50.00	52.00	104	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	49.75	99.5	75-125			
Toluene (Methyl benzene)	50.00	49.20	98.4	75-125			
Trichloroethene	50.00	55.00	110	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	46.25	92.5	75-125			
Ethylbenzene	50.00	46.00	92.0	75-125			
1,1,1-Trichloroethane	50.00	42.85	85.7	75-125			
o-Xylene	50.00	47.30	94.6	75-125			
m,p-Xylenes	100.00	95.40	95.4	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attention: James Elliot Number of Pages 25

Date Received 03/19/2008
Date Reported 03/27/2008

Job Number	Order Date	Client
46528	03/19/2008	T/TSB

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site: Site 14 Lemoore NAS

Enclosed please find results of analyses of 25 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: _____ C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

58646

CHAIN OF CUSTODY RECORD

46523

TEST INSTRUCTIONS & COMMENTS Time: (7) Page 1 of 2 က် က် RELINQUISHED BY: rinted Mane: HECEINED BY 10 Jail 10 8 Signature:/ તાં તં ime: **ANALYSIS REQUESTED** RELINQUISHED BY RECEIVED BY: rinted Nad Signature Date: AETL JOB No. fime: 083/ 8 0928 MS Date: 3. 19.08 RELINQUISHED BY SAMPLER: Christin Date | Cal PRES. NA RECEIVED BY: PROJECT MANAGER

James Eliot
PHONE 805-281-3100 James CONTAINER NUMBER/SIZE 10 m 7 PROJECT# 21384-02 2 DAYS SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX Wister 301 Menter Dr. Suite A. Santa Barbica, CA 93111 FAX PROPERLY COOLED Y NIN NA SAMPLES INTACT! YIM / NA SAMPLES ACCEPTED (Y/N SAME DAY 1455 1450 1500 TIME 1345 355 いない 1330 1355 355 5161 1420 2 55 6041 3.5 NAS TURN AROUND TIME EPA Streams 7065 3/18/18 DATE granoere 1 15.526 □ RUSH Tech 46522 571-7-75 7652 05 572-10-PS 46578 . J 571-10-13 20522-17 ST5-7-RX 16522 15 31-8759x 7 27.59 513-2-PDS (16512 c.) 575-4-PS 146523 M 573-7-755 46528. a 575-2-88 16522 13 LAB ID 573-10-17 18-572 RECEIVED IN GOOD COND. YAN TOTAL NUMBER OF CONTAINERS Tetra CUSTODY SEALS Y/N/NA S, re 572-7-73 573-4-878 571-4-PS 572-2-PS 14. PBS - 2-805 COMPANY ADDRESS **SAMPLE ID** NORMAL NORMAL PROJECT NAME 115 SITE NAME AND COMPANY ADDRESS

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

58653 Ż

16528

TEST INSTRUCTIONS & COMMENTS 110 က် Page of C 3 Time RELINQUISHED BY: RECEIVED BY LABORATORY: Signature: Date / / S Printed Name જાં તં **ANALYSIS REQUESTED** RELINQUISHED BY: RECEIVED BY: Printed Name Signature: AETL JOB No. Time: & 3 HARLED PAGELLAS 0978 MS Ø Date: 3 - 19.08 RELINQUISHED BY SAMPLER: PRES. Z//X FCI RECEIVED BY: PROJECT MANAGER Elliot
PHONE 305 - 637 - 3100 Printed Mame Signature CONTAINER NUMBER/SIZE 70ml 40-1 SUI Menter D. Suite A, Surty Burbary (4 9311/FAX PROJECT NAME PROJECT # 21384-02 02DAYS SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX Witer # Od Nater 11 of 26 PROPERLY COOLED Y/N/NA SAMPLES INTACT Y/ N / NA SAMPLES ACCEPTED Y/N ☐ SAME DAY 1505 TIME 15'35 1200 2451 1555 5451 207 1605 0131 分が **FURN AROUND TIME** 3/18/108 3/18/18 DATE Lemoore □ RUSH 5T5-10-ps 46523-16 C 22.59 % NTS-2-PD 4652217 NT5-4-PP 4657212 NT6-8-PIX 46-72 6+ Tach NT5-6-PD 46572 1 LAB ID -2458 46528 NT6-6 MV 46923 RECEIVED IN GOOD COND. Y/N TOTAL NUMBER OF CONTAINERS Tetra CUSTODY SEALS Y/N/NA NT5-8-PX NT6-4-P3 TB 1 - PDS SAMPLE ID NORMAL SITE NAME AND COMPANY ADDRESS

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **2**

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.01	46528.02	46528.03	46528.04
Client Sample I.D.				ST1-2-PDS	ST1-4-PDS	ST1-7-PDS	ST1-10-PDS
Date Sampled				03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	0.98J	1.97	1.92
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.01	46528.02	46528.03	46528.04
Client Sample I.D.				ST1-2-PDS	ST1-4-PDS	ST1-7-PDS	ST1-10-PDS
Date Sampled				03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	1.09	2.39	2.07
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	0.79J	0.99J
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	16.6	58.1	196	187
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.01	46528.02	46528.03	46528.04
Client Sample I.D.				ST1-2-PDS	ST1-4-PDS	ST1-7-PDS	ST1-10-PDS
Date Sampled				03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	46528.01	46528.02	46528.03	46528.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		118	117	107	104	105
Dibromofluoromethane	75-125		113	108	100	102	105
Toluene-d8	75-125		107	106	102	103	104



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.05	46528.06	46528.07	46528.08	46528.09
Client Sample I.D.			ST2-2-PDS	ST2-4-PDS	ST2-7-PDS	ST2-10-PDS	ST3-2-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	1.16	2.32	1.06	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.05	46528.06	46528.07	46528.08	46528.09
Client Sample I.D.			ST2-2-PDS	ST2-4-PDS	ST2-7-PDS	ST2-10-PDS	ST3-2-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	0.60J	3.73	18.5	5.65	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.05	46528.06	46528.07	46528.08	46528.09
Client Sample I.D.			ST2-2-PDS	ST2-4-PDS	ST2-7-PDS	ST2-10-PDS	ST3-2-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			46528.05	46528.06	46528.07	46528.08	46528.09
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		111	107	108	107	106
Dibromofluoromethane	75-125		94.9	99.7	103	95.7	103
Toluene-d8	75-125		102	104	102	104	103



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.10	46528.11	46528.12	46528.13	46528.14
Client Sample I.D.			ST3-4-PDS	ST3-7-PDS	ST3-10-PDS	ST5-2-PDS	ST5-4-PDS
Date Sampled	Date Sampled		03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	0.58J	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 9

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.10	46528.11	46528.12	46528.13	46528.14
Client Sample I.D.			ST3-4-PDS	ST3-7-PDS	ST3-10-PDS	ST5-2-PDS	ST5-4-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	0.90J	1.11	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 10

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.10	46528.11	46528.12	46528.13	46528.14
Client Sample I.D.			ST3-4-PDS	ST3-7-PDS	ST3-10-PDS	ST5-2-PDS	ST5-4-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			46528.10	46528.11	46528.12	46528.13	46528.14
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		106	108	106	105	105
Dibromofluoromethane	75-125		102	105	109	103	105
Toluene-d8	75-125		104	103	102	106	102



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 11

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.15		
Client Sample I.D.			ST5-7-PDS		
Date Sampled		03/18/2008			
Date Prepared			03/21/2008		
Preparation Method			5030B		
Date Analyzed			03/21/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
Acetone	10	10	ND		
Benzene	0.5	1.0	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND		
Bromochloromethane	0.5	1.0	ND		
Bromodichloromethane	0.5	1.0	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND		
2-Butanone (MEK)	5.0	5.0	ND		
n-Butylbenzene	0.5	1.0	ND		
sec-Butylbenzene	0.5	1.0	ND		
tert-Butylbenzene	0.5	1.0	ND		
Carbon Disulfide	0.5	1.0	ND		
Carbon tetrachloride	0.5	1.0	ND		
Chlorobenzene	0.5	1.0	ND		
Chloroethane	1.5	3.0	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND		
2-Chlorotoluene	0.5	1.0	ND		
4-Chlorotoluene	0.5	1.0	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND		
Dibromochloromethane	0.5	1.0	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND		
Dibromomethane	0.5	1.0	ND		
1,2-Dichlorobenzene	0.5	1.0	ND		
1,3-Dichlorobenzene	0.5	1.0	ND		
1,4-Dichlorobenzene	0.5	1.0	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 12

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.15			
Client Sample I.D.			ST5-7-PDS			
Date Sampled			03/18/2008			
Date Prepared			03/21/2008			
Preparation Method			5030B			
Date Analyzed			03/21/2008			
Matrix			Aqueous			
Units			ug/L			
Dilution Factor			1			
Analytes	MDL	PQL	Results			
Dichlorodifluoromethane	1.5	3.0	ND			
1,1-Dichloroethane	0.5	1.0	ND			
1,2-Dichloroethane (EDC)	0.5	1.0	ND			
1,1-Dichloroethene	0.5	1.0	ND			
cis-1,2-Dichloroethene	0.5	1.0	ND			
trans-1,2-Dichloroethene	0.5	1.0	ND			
1,2-Dichloropropane	0.5	1.0	ND			
1,3-Dichloropropane	0.5	1.0	ND			
2,2-Dichloropropane	0.5	1.0	ND			
1,1-Dichloropropene	0.5	1.0	ND			
cis-1,3-Dichloropropene	0.5	1.0	ND			
trans-1,3-Dichloropropene	0.5	1.0	ND			
Ethylbenzene	0.5	1.0	ND			
Hexachlorobutadiene	1.5	3.0	ND			
2-Hexanone	2.5	5.0	ND			
Isopropylbenzene	0.5	1.0	ND			
p-Isopropyltoluene	0.5	1.0	ND			
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND			
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND			
Methylene chloride (DCM)	2.0	4.0	ND			
Naphthalene	0.5	1.0	ND			
n-Propylbenzene	0.5	1.0	ND			
Styrene	0.5	1.0	ND			
1,1,1,2-Tetrachloroethane	0.5	1.0	ND			
1,1,2,2-Tetrachloroethane	0.5	1.0	ND			
Tetrachloroethene	0.5	1.0	ND			
Toluene (Methyl benzene)	0.5	1.0	ND			
1,2,3-Trichlorobenzene	0.5	1.0	ND			
1,2,4-Trichlorobenzene	0.5	1.0	ND			1
1,1,1-Trichloroethane	0.5	1.0	ND			
1,1,2-Trichloroethane	0.5	1.0	ND		1	
Trichloroethene	0.5	1.0	ND			
Trichlorofluoromethane	0.5	1.0	ND			
1,2,3-Trichloropropane	0.5	1.0	ND			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 13

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.15		
Client Sample I.D.			ST5-7-PDS		
Date Sampled			03/18/2008		
Date Prepared			03/21/2008		
Preparation Method			5030B		
Date Analyzed			03/21/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND		
Vinyl Acetate	0.5	5.0	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND		
o-Xylene	0.5	1.0	ND		
m,p-Xylenes	1.0	2.0	ND		
Our Lab I.D.			46528.15		
Surrogates	%Rec.Limit		% Rec.		
Bromofluorobenzene	75-125		108		
Dibromofluoromethane	75-125		106		
Toluene-d8	75-125		103		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **14**

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.16	46528.17	46528.18	46528.19
Client Sample I.D.				ST5-10-PDS	NT5-2-PDS	NT5-4-PDS	NT5-6-PDS
Date Sampled				03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 15

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.16	46528.17	46528.18	46528.19
Client Sample I.D.				ST5-10-PDS	NT5-2-PDS	NT5-4-PDS	NT5-6-PDS
Date Sampled				03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 16

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.16	46528.17	46528.18	46528.19
Client Sample I.D.				ST5-10-PDS	NT5-2-PDS	NT5-4-PDS	NT5-6-PDS
Date Sampled				03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	46528.16	46528.17	46528.18	46528.19
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		124	106	113	104	104
Dibromofluoromethane	75-125		110	103	97.0	101	105
Toluene-d8	75-125		109	104	105	106	104



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 17

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.20	46528.21	46528.22	46528.23	46528.24
Client Sample I.D.			NT5-8-PDS	NT6-2-PDS	NT6-4-PDS	NT6-6-PDS	NT6-8-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	0.71J	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 18

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			46528.20	46528.21	46528.22	46528.23	46528.24
Client Sample I.D.			NT5-8-PDS	NT6-2-PDS	NT6-4-PDS	NT6-6-PDS	NT6-8-PDS
Date Sampled	-			03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared	*		03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
	Preparation Method		5030B	5030B	5030B	5030B	5030B
Date Analyzed		03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 19

Project ID: T21384-02

Submitted AETL Job Number Client Project Name: EPA Streams TO-65 46528 03/19/2008 T/TSB

Our Lab I.D.			46528.20	46528.21	46528.22	46528.23	46528.24
Client Sample I.D.			NT5-8-PDS	NT6-2-PDS	NT6-4-PDS	NT6-6-PDS	NT6-8-PDS
Date Sampled			03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
Date Prepared			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			03/22/2008	03/22/2008	03/22/2008	03/22/2008	03/22/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			46528.20	46528.21	46528.22	46528.23	46528.24
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		103	102	109	111	116
Dibromofluoromethane	75-125		106	96.4	105	103	76.4
Toluene-d8	75-125		106	102	103	107	106



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **20**

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.25		
Client Sample I.D.				TB1-PDS		
Date Sampled				03/18/2008		
Date Prepared			03/24/2008	03/24/2008		
Preparation Method			5030B	5030B		
Date Analyzed			03/24/2008	03/24/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Acetone	10	10	ND	ND		
Benzene	0.5	1.0	ND	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND		
Bromochloromethane	0.5	1.0	ND	ND		
Bromodichloromethane	0.5	1.0	ND	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND		
2-Butanone (MEK)	5.0	5.0	ND	ND		
n-Butylbenzene	0.5	1.0	ND	ND		
sec-Butylbenzene	0.5	1.0	ND	ND		
tert-Butylbenzene	0.5	1.0	ND	ND		
Carbon Disulfide	0.5	1.0	ND	ND		
Carbon tetrachloride	0.5	1.0	ND	ND		
Chlorobenzene	0.5	1.0	ND	ND		
Chloroethane	1.5	3.0	ND	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND		
2-Chlorotoluene	0.5	1.0	ND	ND		
4-Chlorotoluene	0.5	1.0	ND	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND		
Dibromochloromethane	0.5	1.0	ND	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND		
Dibromomethane	0.5	1.0	ND	ND		
1,2-Dichlorobenzene	0.5	1.0	ND	ND		
1,3-Dichlorobenzene	0.5	1.0	ND	ND		
1,4-Dichlorobenzene	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 21

Project ID: T21384-02

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Our Lab I.D.			Method Blank	46528.25		
Client Sample I.D.			TB1-PDS			
Date Sampled	Date Sampled			03/18/2008		
Date Prepared		03/24/2008	03/24/2008			
Preparation Method			5030B	5030B		
Date Analyzed			03/24/2008	03/24/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Dichlorodifluoromethane	1.5	3.0	ND	ND		
1,1-Dichloroethane	0.5	1.0	ND	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND		
1,1-Dichloroethene	0.5	1.0	ND	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND	ND		
1,2-Dichloropropane	0.5	1.0	ND	ND		
1,3-Dichloropropane	0.5	1.0	ND	ND		
2,2-Dichloropropane	0.5	1.0	ND	ND		
1,1-Dichloropropene	0.5	1.0	ND	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	1	
Ethylbenzene	0.5	1.0	ND	ND		
Hexachlorobutadiene	1.5	3.0	ND	ND		
2-Hexanone	2.5	5.0	ND	ND		
Isopropylbenzene	0.5	1.0	ND	ND	+	
p-Isopropyltoluene	0.5	1.0	ND	ND	+	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	+	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND		
Methylene chloride (DCM)	2.0	4.0	ND	ND	+	
Naphthalene	0.5	1.0	ND	ND		
n-Propylbenzene	0.5	1.0	ND	ND		
Styrene	0.5	1.0	ND	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND		
Tetrachloroethene	0.5	1.0	ND	ND		
Toluene (Methyl benzene)	0.5	1.0	ND	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND		
1,1,1-Trichloroethane	0.5	1.0	ND	ND		
1,1,2-Trichloroethane	0.5	1.0	ND	ND		
Trichloroethene	0.5	1.0	ND	ND		
Trichlorofluoromethane	0.5	1.0	ND	ND		
1,2,3-Trichloropropane	0.5	1.0	ND	ND		
1,2,3-111cmoropropane	0.5	1.0	MD	MD		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Client

T/TSB

ANALYTICAL RESULTS

Page: 22

Project ID: T21384-02

Submitted AETL Job Number Project Name: EPA Streams TO-65 46528 03/19/2008

Our Lab I.D.			Method Blank	46528.25		
Client Sample I.D.				TB1-PDS		
Date Sampled				03/18/2008		
Date Prepared			03/24/2008	03/24/2008		
Preparation Method			5030B	5030B		
Date Analyzed			03/24/2008	03/24/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND		
Vinyl Acetate	0.5	5.0	ND	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND		
o-Xylene	0.5	1.0	ND	ND		
m,p-Xylenes	1.0	2.0	ND	ND		
Our Lab I.D.			Method Blank	46528.25		
Surrogates	%Rec.Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		117	122		
Dibromofluoromethane	75-125		97.3	109		
Toluene-d8	75-125		111	113		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 23

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 032108; Dup or Spiked Sample: B032108; LCS: Clean Water; QC Prepared: 03/21/2008; QC Analyzed: 03/21/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	54.50	109	50.00	55.00	110	<1	75-125	<20
Chlorobenzene	0.0	50.00	49.05	98.1	50.00	49.95	99.9	1.8	75-125	<20
1,1-Dichloroethene	0.0	50.00	52.50	105	50.00	53.50	107	1.9	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	59.50	119	50.00	61.00	122	2.5	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	49.20	98.4	50.00	49.55	99.1	<1	75-125	<20
Trichloroethene	0.0	50.00	59.50	119	50.00	60.00	120	<1	75-125	<20

QC Batch No: 032108; Dup or Spiked Sample: B032108; LCS: Clean Water; QC Prepared: 03/21/2008; QC Analyzed: 03/21/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	55.50	111	75-125			
Chlorobenzene	50.00	51.50	103	75-125			
1,1-Dichloroethene	50.00	54.50	109	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	60.00	120	75-125			
Toluene (Methyl benzene)	50.00	49.75	99.5	75-125			
Trichloroethene	50.00	61.00	122	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	58.50	117	75-125			
Ethylbenzene	50.00	52.00	104	75-125			
1,1,1-Trichloroethane	50.00	51.00	102	75-125			
o-Xylene	50.00	53.50	107	75-125			
m,p-Xylenes	100.00	105.00	105	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **24**

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 032208; Dup or Spiked Sample: B032208; LCS: Clean Water; QC Prepared: 03/22/2008; QC Analyzed: 03/22/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	56.00	112	50.00	55.50	111	<1	75-125	<20
Chlorobenzene	0.0	50.00	50.00	100	50.00	50.50	101	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	44.50	89.0	50.00	48.00	96.0	7.6	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	61.00	122	50.00	59.00	118	3.3	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	49.55	99.1	50.00	49.70	99.4	<1	75-125	<20
Trichloroethene	0.0	50.00	61.00	122	50.00	61.50	123	<1	75-125	<20

QC Batch No: 032208; Dup or Spiked Sample: B032208; LCS: Clean Water; QC Prepared: 03/22/2008; QC Analyzed: 03/22/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	55.50	111	75-125			
Chlorobenzene	50.00	51.00	102	75-125			
1,1-Dichloroethene	50.00	40.30	80.6	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	42.20	84.4	75-125			
Toluene (Methyl benzene)	50.00	49.60	99.2	75-125			
Trichloroethene	50.00	57.50	115	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	42.30	84.6	75-125			
Ethylbenzene	50.00	52.00	104	75-125			
1,1,1-Trichloroethane	50.00	51.00	102	75-125			
o-Xylene	50.00	55.00	110	75-125			
m,p-Xylenes	100.00	105.00	105	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 25

Project ID: T21384-02

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
46528	03/19/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 032408; Dup or Spiked Sample: B032408; LCS: Clean Water; QC Prepared: 03/24/2008; QC Analyzed: 03/24/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	49.65	99.3	50.00	48.75	97.5	1.8	75-125	<20
Chlorobenzene	0.0	50.00	50.50	101	50.00	49.05	98.1	2.9	75-125	<20
1,1-Dichloroethene	0.0	50.00	55.50	111	50.00	55.00	110	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	52.00	104	50.00	52.50	105	<1	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	47.95	95.9	50.00	47.15	94.3	1.7	75-125	<20
Trichloroethene	0.0	50.00	58.50	117	50.00	51.50	103	12.7	75-125	<20

QC Batch No: 032408; Dup or Spiked Sample: B032408; LCS: Clean Water; QC Prepared: 03/24/2008; QC Analyzed: 03/24/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	49.45	98.9	75-125			
Chlorobenzene	50.00	49.50	99.0	75-125			
1,1-Dichloroethene	50.00	51.50	103	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	49.70	99.4	75-125			
Toluene (Methyl benzene)	50.00	46.40	92.8	75-125			
Trichloroethene	50.00	58.00	116	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	47.75	95.5	75-125			
Ethylbenzene	50.00	50.50	101	75-125			
1,1,1-Trichloroethane	50.00	47.35	94.7	75-125			
o-Xylene	50.00	52.00	104	75-125			
m,p-Xylenes	100.00	100.00	100	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attention: James Elliot Number of Pages 21

Date Received 05/15/2008
Date Reported 06/04/2008

Job Number	Order Date	Client
47416	05/15/2008	T/TSB

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site: Site 14 Lemoore NAS

Enclosed please find results of analyses of 24 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: _____ C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

	SHIPPED TO:		.7	į t	$\boldsymbol{\varnothing}$
7301 Menter Dr.	(, TETRA TECH, INC. A	74213 State Street, Suite 100	Santa Barbara, CA 93110	Phone (805) 681-3100	FAX (805) 681-3108
		F	Ļ)	

2834 N. Naomi St.

Burbank, CA 91504

PAGE 1 OF 3

DATE **5/13/08**

SITE Lemoore NAS

CHAIN OF CUSTODY RECORD

CLIENT EPA					ANA	LYTI	CALN	ANALYTICAL METHODS	DS							TURN-AROUND TIME:
PROJECT NAME Streams	ams T065				!	*******										Standard
PROJECT MANAGER	James Elliot	Chain			Rietals		SOT		ananı							
TC# 21384-03	-03	Carbon			TIMA:) 1901		3 ,ənsı							OBSERVATIONS/COMMENTS:
SAMPLERS (Signatures)			s			lΛ								SJƏU		
× Y	Charle) / əsə				muim									əldı	
×			94 180 382 PC	VS 07	VIS 04	олиО 9	'S N-N CF'8 \	pyins	G Met				√Type iiner T	er of C	ne2 be	
SAMPLE ID	DATE TIME	SW8				E218		_		134 <u>0</u>	A퀴기댁				Filtere	
ST1-2PDS	5/13/08 0930	X											WG	1	Ì	10.91hth
ST1-4 PDS	/ 6935	X												ļ		4416.02
STI-7 PDS	0440	X														E0. 9/1/2h
ST1-10 PDS	0945	X									-					ho-9/hth
ST2-2 PDS	0955	X	•													50- 3/hth
ST2-4 PDS	1000	X														90.91/12
ST2-7 PDS	5001	X	\rightarrow												7	474/6.07
ST2-10 PDS	1010	×					<u>-,</u>								-	474/6.08
ST3-2 PDS	1030	X	-													47416.09
573-4 PDS	1100	X	•	•									→ →	4	Ť	474/k ,/o
MATRIX S = Soil TYPE: W = Water	CONTAINER G TYPE: SS	G = Glass SS = Stainless Steel	s Stee	_	R E	SER	PRESERVATIVES All samples are pre	PRESERVATIVES: All samples are preserved at 4° C.	ed at 4°	c.	1		1	<u>.</u>		TEMPERATURE BLANK EACH COOLER: (YES) NO
Se diliginal CM 130	CH IT VNOIS	- riasiic	ŀ		PΛΛ	Sa	ubies a	re pres	erved as	as indic	Water samples are preserved as indicated on the sample labels.	Sam.	elabe	Š.	ľ)
Chris Cosby	SICINAL CAS	N	+	•	FETRA	TETRA TECH, INC.	J, INC.		₹ ' À	16	80,	71 	1445			TOTAL NUMBER OF CONTAINERS
RECEIVED BY:	SIGNATURE: 1-1/8	K	Ô	COMPANY:	A	1/2	<u> </u>		DATE: 02 /	9	80.	TIME	197	•	A-5	METHOD OF SHIPMENT Fed Ex
RELINQUISHED BY:	SIGNATURE:		NO.	COMPANY:					DATE	ш Ш		TIME			0) LL	SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:
RECEIVED BY:	SIGNATURE:		S S	COMPANY:					DATE:	ùi		TIME				
			_									_				

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

301 Menter Dr. TETRA TECH, INC. A SHIPPED TO: 4213 State Street, Suite 198 Santa Barbara, CA 9311**\$** Phone (805) 681-3100 FAX (805) 681-3108

PROJECT NAME

#5

CLENT

2834 N. Naom: St AETL

9/H+Harase

Burbank, CA 91504

CHAIN OF CUSTODY RECORD

PAGE 2

DATE 5/13/08

14×

Lemoore

SITE

۾ ۾

OBSERVATIONS/COMMENTS: TURN-AROUND TIME: Standard 51.3/626 **式1**935去5 47416.18 61.315.55 61.3/P£P d.9/1/27 11. 3]hzh *ከ⊬ 9/Ь≵*Ь 474/16.12 Filtered Sample Number of Confainers Container Type S PLFA **JPCR** AM23G Metabolic Acids ANAL YTICAL METHODS AM20GAX Methane, Ethane, Ethene 376.2 Sulfide E323'S N-N | E412'1 LOC E300 CL,S / 310.1 ALK / 160.1 TDS IV muimondO 8.81SE 5W6010 / 7470 / 7471 CAM17 Metals **SHA9 MIS 0728WS** SW8270 SVOCs 2M8085 bCB2 SW8015 Diesel / Gas / Carbon Chain SM8SE0 AOC® 0811 1135 2611 1200 TIME 5021 5/13/08 11.05 0121 Elliot DATE 7065 50-48512 Tames Streams ST5- 16 PDS ST3-7PDS STS-2PDS ST5 - 7PDS ST3 - 10 PDS ST5-4PDS NTS- 2 PDS NTS-4PPS SAMPLE ID NTS-6PDS EPA SAMPLERS (Signatures) PROJECT MANAGER

RELINQUISHED BY:	SIGNATURE:		TIME	TOTAL NUMBER OF CONTAINERS
Chris Crosby	This Cooks	IEIKA IECH, INC.	5441 80/41/5	42 Jo 01
RECEIVED BY:	SIGNATURE: ()	COMPANY: 7 July /	MIL	METHOD OF SHIPMENT
1/2		をプし	02/1/8/08/	Fed Ex
RELINQUISHED 8Y:	SIGNATURE:	COMPANY:	DATE:	SPECIAL SHIPMENT/HANDLING/STORAGE
				REQUIREMENTS:

DATE

COMPANY

SIGNATURE

RECEIVED BY

TEMPERATURE BLANK
EACH COOLER: (YES) NO

All samples are preserved at 4° C. Water samples are preserved as indicated on the sample labels.

PRESERVATIVES

G = Glass SS = Stainless Steel

CONTAINER TYPE:

1215

NT5-8PDS

W = Water S = Soil

MATRIX PE RELINQUISHED Aris

P = Plastic

2.3/44

NUMBER OF CONTAINERS 42 Jo 01

Œ
14/06/0
001 70
Came
Ě

DISTRIBUTION: White = Lab Canary = Client Pink = Tetra Tech, Inc.

| TETRA TECH, INC. | A SHIPPED TO: | 4213 State Stroot, Suite 188 | Santa Barbara, CA 9311 | Phone (805) 681-3100 | B.L.

Bucbank, CA 91504

508*474/6
CHAIN OF CUSTODY RECORD

ND TIME:	Standard		OBSERVATIONS/COMMENTS:					<i>b</i>	26	3	The state of the s		i e					E BLAN	EACH COOLER: (YES) NO	TOTAL NUMBER OF CONTAINERS 4	IIPMENT EX	SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:	
TURN-AROUND TIME:	25	.)BSERVATI(47416.21	28. HYY	47416,23	12. 9hth								EAC	OTAL NUMBE	METHOD OF SHIPMENT	PECIAL SHIPM	
				~	əjdu	ns2 be	Filtere	j			Ť							1				100 EE	1
				SJÐL		O io 190]			→								Sis.	۱۸	8	<u>.</u>	
		•				√Type Tiner T		\overline{w}			\rightarrow		ļ	 	1	ļ		1	le lab	1			
								حم	_		7		<u> </u>		1		ļ., <u>.</u>	1	samp	TIME	TIME:	TIME	
																			n the		~		1
							A7J9			<u> </u>			-	-	∦			-	All samples are preserved at 4 °C. Water samples are preserved as indicated on the sample labels.	60	Sc.		
							OPCF				<u> </u>		 	 		-		٠,	indic	<i>\text{h}</i>	1 =	₹	
ا ۵ ا				sbioA	abolic	G Met												ָּ ;	All samples are preserved at 4 Water samples are preserved as i	PATE S	STE O	DATE	į
Š		auau	g 'auei	11 3 , Eth										П					eserv				
MET!				01.17		N-N 2								$\downarrow \downarrow$		-	-	ES:	arepi				
SALI		SQT	1.031										1	Y	$ar{}$			ATIV	is are nples	, INC			
ANALYTICAL METHODS						ол4О д						,		t	")	_		PRESERVATIVES:	r san	TETRA TECH, INC			ļ
NA	5	Metals	TIMA:	0 1 Z 7		74 / OF	09MS							 -				PRES	All sa Wate	₽¥.	6	1	
				S	HA9 N	NIS 04	SW82													12	COMPANY:	E	
						VS 079							ļ .	_	-		ļ		5		COMPANY	MPAN	
				Si		181 Pes 182 PC										•		ď	s off	+	8	8	1
	,	Chain	gupou										Н	-	ļ <u></u>			ISS Pinfor	all les tic				
						OV 09		X	X	X	λ				<u> </u>			G = Glass	oo – otaliil P = Plastic	10	V .		ļ
							TIME	0521	5221	0421	Shzt		T					ეთ წ 	8 4	2			
		.							12	<u> </u>	21		\parallel	_				Ä		Ü	$ \varnothing $		
	5,	Elliot	•				DATE	89/21/5	_									CONTAINER	ii.	~0	A	1	
	T065	EI			1			1/9					_	_		ļ		CONT	-	91	1 7	<u></u>	
	1	James	-03		6 60		į	ا	1.0	10	اء								;	SIGNATURE	SIGNATURE	SIGNATURE	
*	Stranns		21384-	s)	2		LE ID	NT6-2PDS	NTG- 4 PDS	SOL 9	8 PDS							Jil Safor	varer	s ng say		100	
EPA	- 1	PROJECT MANAGER	2	SAMPLERS (Signatures)	3		SAMPLE ID	->	1	1								S = Soil	> !! ^^	7	(X		
	NAME	MAN		S (Sign	17			\	7	NT2	NT6-	$\ \ $								· ·	T.		
	PROJECT NAME	ECT		ZER	\			`	~	<	2							¥ .	•	RELINQUISHED BY	RECEIVED BY	RELINQUISHER	
CLIENT	Ž.	RO.	<u>‡</u>	SAME	×	×												MATRIX TVDC:	<u>Г</u>				1



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			Method Blank	47416.01	47416.02	47416.03	47416.04
Client Sample I.D.				ST1-2 PDS	ST1-4 PDS	ST1-7 PDS	ST1-10 PDS
Date Sampled				05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/19/2008	05/19/2008	05/19/2008	05/19/2008	05/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/19/2008	05/19/2008	05/19/2008	05/19/2008	05/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	1.45	1.32	1.01
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1.4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			Method Blank	47416.01	47416.02	47416.03	47416.04
Client Sample I.D.				ST1-2 PDS	ST1-4 PDS	ST1-7 PDS	ST1-10 PDS
Date Sampled				05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/19/2008	05/19/2008	05/19/2008	05/19/2008	05/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/19/2008	05/19/2008	05/19/2008	05/19/2008	05/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	1.63	1.98	1.58
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	12.8	101	119	69.4
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0519085A1

Our Lab I.D.			Method Blank	47416.01	47416.02	47416.03	47416.04
Client Sample I.D.			ST1-2 PDS	ST1-4 PDS	ST1-7 PDS	ST1-10 PDS	
Date Sampled				05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/19/2008	05/19/2008	05/19/2008	05/19/2008	05/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/19/2008	05/19/2008	05/19/2008	05/19/2008	05/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	47416.01	47416.02	47416.03	47416.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		116	108	119	111	113
Dibromofluoromethane	75-125		97.0	91.7	98.3	98.1	96.8
Toluene-d8	75-125		111	106	107	106	107



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.05	47416.06	47416.07	47416.08	47416.09
Client Sample I.D.			ST2-2 PDS	ST2-4 PDS	ST2-7 PDS	ST2-10 PDS	ST3-2 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/19/2008	05/19/2008	05/19/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/19/2008	05/19/2008	05/19/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	1.44	1.47	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.05	47416.06	47416.07	47416.08	47416.09
Client Sample I.D.			ST2-2 PDS	ST2-4 PDS	ST2-7 PDS	ST2-10 PDS	ST3-2 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/19/2008	05/19/2008	05/19/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/19/2008	05/19/2008	05/19/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	5.83	9.17	2.73	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0519085A1

Our Lab I.D.			47416.05	47416.06	47416.07	47416.08	47416.09
Client Sample I.D.			ST2-2 PDS	ST2-4 PDS	ST2-7 PDS	ST2-10 PDS	ST3-2 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/19/2008	05/19/2008	05/19/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/19/2008	05/19/2008	05/19/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			47416.05	47416.06	47416.07	47416.08	47416.09
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		107	110	110	114	115
Dibromofluoromethane	75-125		94.7	97.9	101	83.4	100
Toluene-d8	75-125		104	110	103	105	104



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.10	47416.11	47416.12	47416.13	47416.14
Client Sample I.D.			ST3-4 PDS	ST3-7 PDS	ST3-10 PDS	ST5-2 PDS	ST5-4 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030в
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 9

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.10	47416.11	47416.12	47416.13	47416.14
Client Sample I.D.			ST3-4 PDS	ST3-7 PDS	ST3-10 PDS	ST5-2 PDS	ST5-4 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	1.37	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	1.08	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 10

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0519085A1

Our Lab I.D.			47416.10	47416.11	47416.12	47416.13	47416.14
Client Sample I.D.			ST3-4 PDS	ST3-7 PDS	ST3-10 PDS	ST5-2 PDS	ST5-4 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			47416.10	47416.11	47416.12	47416.13	47416.14
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		113	113	112	122	113
Dibromofluoromethane	75-125		103	102	104	104	108
Toluene-d8	75-125		105	104	104	108	103



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 11

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			Method Blank	47416.15	47416.16	47416.17	47416.18
Client Sample I.D.				ST5-7 PDS	ST5-10 PDS	NT5-2 PDS	NT5-4 PDS
Date Sampled				05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030В
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **12**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			Method Blank	47416.15	47416.16	47416.17	47416.18
Client Sample I.D.				ST5-7 PDS	ST5-10 PDS	NT5-2 PDS	NT5-4 PDS
Date Sampled				05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 13

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			Method Blank	47416.15	47416.16	47416.17	47416.18
Client Sample I.D.				ST5-7 PDS	ST5-10 PDS	NT5-2 PDS	NT5-4 PDS
Date Sampled				05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	47416.15	47416.16	47416.17	47416.18
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		122	116	119	117	114
Dibromofluoromethane	75-125		106	104	104	97.8	96.9
Toluene-d8	75-125		103	103	106	104	104



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 14

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.19	47416.20	47416.21	47416.22	47416.23
Client Sample I.D.			NT5-6 PDS	NT5-8 PDS	NT6-2 PDS	NT6-4 PDS	NT6-6 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 15

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.19	47416.20	47416.21	47416.22	47416.23
Client Sample I.D.			NT5-6 PDS	NT5-8 PDS	NT6-2 PDS	NT6-4 PDS	NT6-6 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **16**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0519085A2

Our Lab I.D.			47416.19	47416.20	47416.21	47416.22	47416.23
Client Sample I.D.			NT5-6 PDS	NT5-8 PDS	NT6-2 PDS	NT6-4 PDS	NT6-6 PDS
Date Sampled			05/13/2008	05/13/2008	05/13/2008	05/13/2008	05/13/2008
Date Prepared			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			05/20/2008	05/20/2008	05/20/2008	05/20/2008	05/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			47416.19	47416.20	47416.21	47416.22	47416.23
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		117	116	118	117	116
Dibromofluoromethane	75-125		102	106	101	103	101
Toluene-d8	75-125		103	102	104	103	99.1



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 17

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.24		
Client Sample I.D.			NT6-8 PDS		
Date Sampled			05/13/2008		
Date Prepared		05/20/2008			
Preparation Method		5030B			
Date Analyzed			05/20/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
Acetone	10	10	ND		
Benzene	0.5	1.0	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND		
Bromochloromethane	0.5	1.0	ND		
Bromodichloromethane	0.5	1.0	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND		
2-Butanone (MEK)	5.0	5.0	ND		
n-Butylbenzene	0.5	1.0	ND		
sec-Butylbenzene	0.5	1.0	ND		
tert-Butylbenzene	0.5	1.0	ND		
Carbon Disulfide	0.5	1.0	ND		
Carbon tetrachloride	0.5	1.0	ND		
Chlorobenzene	0.5	1.0	ND		
Chloroethane	1.5	3.0	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND		
2-Chlorotoluene	0.5	1.0	ND		
4-Chlorotoluene	0.5	1.0	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND		
Dibromochloromethane	0.5	1.0	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND		
Dibromomethane	0.5	1.0	ND		
1,2-Dichlorobenzene	0.5	1.0	ND		
1,3-Dichlorobenzene	0.5	1.0	ND		
1,4-Dichlorobenzene	0.5	1.0	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 18

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Our Lab I.D.			47416.24			
Client Sample I.D.		NT6-8 PDS				
Date Sampled			05/13/2008			
Date Prepared			05/20/2008			
Preparation Method	Preparation Method					
Date Analyzed						
Matrix			Aqueous			
Units			ug/L			
Dilution Factor			1			
Analytes	MDL	PQL	Results			
Dichlorodifluoromethane	1.5	3.0	ND			
1,1-Dichloroethane	0.5	1.0	ND			
1,2-Dichloroethane (EDC)	0.5	1.0	ND			
1,1-Dichloroethene	0.5	1.0	ND			
cis-1,2-Dichloroethene	0.5	1.0	ND			
trans-1,2-Dichloroethene	0.5	1.0	ND			
1,2-Dichloropropane	0.5	1.0	ND			
1,3-Dichloropropane	0.5	1.0	ND			
2,2-Dichloropropane	0.5	1.0	ND			
1,1-Dichloropropene	0.5	1.0	ND			
cis-1,3-Dichloropropene	0.5	1.0	ND			
trans-1,3-Dichloropropene	0.5	1.0	ND			
Ethylbenzene	0.5	1.0	ND			
Hexachlorobutadiene	1.5	3.0	ND			
2-Hexanone	2.5	5.0	ND			
Isopropylbenzene	0.5	1.0	ND			
p-Isopropyltoluene	0.5	1.0	ND			
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND			
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND			
Methylene chloride (DCM)	2.0	4.0	ND			
Naphthalene	0.5	1.0	ND			
n-Propylbenzene	0.5	1.0	ND			
Styrene	0.5	1.0	ND			
1,1,1,2-Tetrachloroethane	0.5	1.0	ND			
1,1,2,2-Tetrachloroethane	0.5	1.0	ND			
Tetrachloroethene	0.5	1.0	ND			
Toluene (Methyl benzene)	0.5	1.0	ND			
1,2,3-Trichlorobenzene	0.5	1.0	ND			
1,2,4-Trichlorobenzene	0.5	1.0	ND			
1,1,1-Trichloroethane	0.5	1.0	ND			
1,1,2-Trichloroethane	0.5	1.0	ND			
Trichloroethene	0.5	1.0	ND			
Trichlorofluoromethane	0.5	1.0	ND			
1,2,3-Trichloropropane	0.5	1.0	ND			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 19

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0519085A2

Our Lab I.D.			47416.24		
Client Sample I.D.			NT6-8 PDS		
Date Sampled			05/13/2008		
Date Prepared		05/20/2008			
Preparation Method		5030B			
Date Analyzed		05/20/2008			
Matrix		Aqueous			
Units		ug/L			
Dilution Factor			1		
Analytes	MDL	PQL	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND		
Vinyl Acetate	0.5	5.0	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND		
o-Xylene	0.5	1.0	ND		
m,p-Xylenes	1.0	2.0	ND		
Our Lab I.D.			47416.24		
Surrogates	%Rec.Limit		% Rec.		
Bromofluorobenzene	75-125		120		
Dibromofluoromethane	75-125		109		
Toluene-d8	75-125		104		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 20

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0519085A1; Dup or Spiked Sample: B0519085A1; LCS: Clean Water; QC Prepared: 05/19/2008; QC Analyzed: 05/20/2008; Units: ppb

	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD	
Analytes	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit	
Benzene	50.00	49.40	98.8	50.00	49.10	98.2	<1	75-125	<20	
Chlorobenzene	50.00	44.60	89.2	50.00	44.50	89.0	<1	75-125	<20	
1,1-Dichloroethene	50.00	51.00	102	50.00	52.70	105	2.90	75-125	<20	
Methyl-tert-butyl ether (MTBE)	50.00	53.00	106	50.00	53.60	107	<1	75-125	<20	
Toluene (Methyl benzene)	50.00	45.20	90.4	50.00	45.30	90.6	<1	75-125	<20	
Trichloroethene	50.00	48.60	97.2	50.00	48.60	97.2	<1	75-125	<20	

QC Batch No: 0519085A1; Dup or Spiked Sample: B0519085A1; LCS: Clean Water; QC Prepared: 05/19/2008; QC Analyzed: 05/20/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	50.80	102	75-125			
Chlorobenzene	50.00	46.00	92.0	75-125			
1,1-Dichloroethene	50.00	51.50	103	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	51.10	102	75-125			
Toluene (Methyl benzene)	50.00	46.90	93.8	75-125			
Trichloroethene	50.00	50.60	101	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	51.30	103	75-125			
Ethylbenzene	50.00	50.70	101	75-125			
1,1,1-Trichloroethane	50.00	54.70	109	75-125			
o-Xylene	50.00	51.90	104	75-125			
m,p-Xylenes	100.00	103.00	103	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 21

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47416	05/15/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0519085A2; Dup or Spiked Sample: B0519085A2; LCS: Clean Water; QC Prepared: 05/20/2008; QC Analyzed: 05/20/2008; Units: ppb

	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD	
Analytes	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit	
Benzene	50.00	49.90	99.8	50.00	48.10	96.2	3.67	75-125	<20	
Chlorobenzene	50.00	45.40	90.8	50.00	44.90	89.8	1.11	75-125	<20	
1,1-Dichloroethene	50.00	48.20	96.4	50.00	50.00	100	3.67	75-125	<20	
Methyl-tert-butyl ether (MTBE)	50.00	57.10	114	50.00	56.40	113	<1	75-125	<20	
Toluene (Methyl benzene)	50.00	45.70	91.4	50.00	44.50	89.0	2.66	75-125	<20	
Trichloroethene	50.00	49.50	99.0	50.00	52.50	105	5.88	75-125	<20	

QC Batch No: 0519085A2; Dup or Spiked Sample: B0519085A2; LCS: Clean Water; QC Prepared: 05/20/2008; QC Analyzed: 05/20/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	52.70	105	75-125			
Chlorobenzene	50.00	47.20	94.4	75-125			
1,1-Dichloroethene	50.00	49.00	98.0	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	57.00	114	75-125			
Toluene (Methyl benzene)	50.00	47.30	94.6	75-125			
Trichloroethene	50.00	52.40	105	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	56.10	112	75-125			
Ethylbenzene	50.00	52.10	104	75-125			
1,1,1-Trichloroethane	50.00	58.60	117	75-125			
o-Xylene	50.00	54.50	109	75-125			
m,p-Xylenes	100.00	107.00	107	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attention: James Elliot Number of Pages 28

Date Received 06/17/2008
Date Reported 06/30/2008

Job Number	Order Date	Client
47890	06/17/2008	T/TSB

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site: Site 14 Lemoore NAS

Enclosed please find results of analyses of 25 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: _____ C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

Nº 52285 47890 Page 2 of 2

Time: O : OO TEST INSTRUCTIONS & COMMENTS Page 2 of 2 က က Time: RELINQUISHED BY: Date: 64/2/08 47890.25 22.968th 47890.23 44890.24 47890.20 12.068=21 RECEIVED BY LABORATORY 47890-P 71. a8825 7.88.1 47890-18 Printed Name: rinted Name: Signature: Signature: Date: ٥i Time: Time; ANALYSIS REQUESTED RELINQUISHED BY: RECEIVED BY: Printed Name rinted Name: Signature: Date: AETL JOB No. 8280 MS Printed Name: Ch.13 80/91 RELINQUISHED BY SAMPLER: Na. Pou PRES. HCI RECEIVED BY: Elliot 361 Menter Pr. Swite A Santa Barbara, CA 93105 FAX 805-681-3108 rinted Nag Date: Signature: PHONE 805 - 681 - 3100 CONTAINER NUMBER/SIZE 21384-03 , 40mL 1 /40ml PROJECT MANAGER ☐ 2 DAYS ☐ 3 DAYS SAMPLE RECEIPT - TO BE FILLED BY LABORATORY Water MATRIX 80 * 11 of 26 PROPERLY COOLED Y/N/NA SAMPLES INTACT Y/ N/ NA SAMPLES ACCEPTED Y/N SAME DAY 1420 0080 TIME 1135 1140 1150 512 145 0021 1205 1155 Lemoore NAS **TURN AROUND TIME** /13/168 DATE □ RUSH Tetra Tech LAB ID Site 14 OTAL NUMBER OF CONTAINERS Streams RECEIVED IN GOOD COND. Y/N CUSTODY SEALS Y/N/NA ST5-10 PDS NT6-8 PDS NTS-8PDS NT6-6 PDS NT5-2 PDS NT6-2 PDS SOUN- 9IN NTS-4PDS NT5-6PDS COMPANY ADDRESS TBI-PDS SAMPLE ID NORMAL PROJECT NAME SITE NAME AND COMPANY ADDRESS X

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator



American Environmental Testing Laboratory Inc. 2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

88-AETL• (818) 845-8200 • Fax: (818) 845-8840	318) 845-8840 • www.aetlab.com	4704	1822G .N.
Tech	PROJECT MANAGER James Elliot	AETL JOB No. 7700	Page L of 2
	PHONE 805 - 681-3100	ANALYSIS REQUESTED	STUBBLE & SNOED I GESTI TSET
te A , Santa Bacbara CA 93105 FAX	\$ 93105 FAX 805-681-3108		
	ŀ		

							_	ったベイ	-
COMPANY Tetra Tech	Tech		PROT	PROJECT MANAGER	FTANGS	Elliot	AETL JOB No.	(+200	Page of 2
COMPANY ADDRESS				PHONE 805-	-189-508	3100	ANALY	ANALYSIS REQUESTED	STREMMOO & SINCIPOLIGITSINI TOOL
301 Monter Dr. Swite	A San	ta Bacba	'a, CA 95.	105 FAX 8	-129-508	3108			TEST INSTRUCTIONS & COMMENTS
PROJECT NAME / PROJEC	70.65			14	- 48	03	70/		
SITE NAME Site 19	Lemoore	re NAS	5		ì		1 <		
ress							מצום		
SAMPLE ID LAB ID		DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	8 MS		
1 ST1-2PDS	19	13/08	5460	0945 Water	1/40mL	- Naz Pou	X		478001
271-4PDS			1005			,	X		4736.02
1 STI-770S			1010			,	X		47890.03
50901-175			1015				X		478h.04
572-2PDS			1025				X		77860.05
\$72-4PDS			1630			<u> </u>	X		47850.06
5772-778			1035				X		478,000
\$ ST2-10PBS			1040		<u>.</u>		X		80.08826
			1045				X		4+890,09
" ST3-4PD5	:		1650				X		47830 · 10
" ST3-7PDS	:		1655				X		47890-11
_	 .		1100				X		42730.12
" STS-2PDS			1105				X		47890-13
" STS-4PDS			0111				X		47890.14
" STS-7PDS	7		11.15	~	→	→	X		47830.16
SAMPLE RECEIPT - TO BE FILLED BY LABORATORY	IPT - TO BE	FILLED	BY LAB(DRATOR		RELINQUISHED BY SAMPLER:	1.	RELINQUISHED BY: 2.	
TOTAL NUMBER OF CONTAINERS	15.0 26	PROPERLY COOLED		Y/N/NA	kō —	Signature:	Seal	Signature:	Signature:
CUSTODY SEALS Y/N/NA			SAMPLES INTACT Y/ N / NA	/NA	ď	Printed Name: Chris	Ç	Printed Name:	Printed Name:
RECEIVED IN GOOD COND. Y / N		SAMPLES A	SAMPLES ACCEPTED 1	A/N	Ö	80/91/9 _{:pare:}		Date: Time:	Date: Time:
	TURN ARC	TURN AROUND TIME			<u>«</u>	RECEIVED BY:	+	RECEIVED BY: 2.	RECEIVED BY 3.
	[C.	SAMEDAY	Ê		Signature;	\	Signature:	Signature:
MORMAL NORMAL	RUSH	10	□ NEXT DAY		DAYS	Printed Name:		і Nате:	Printed Name.
					ď	Dala:	Тіте:	Date: Time:	Date: 1/1/08 Time: 16:00

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			Method Blank	47890.01	47890.02	47890.03	47890.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	0.840J	1.36	1.00
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			Method Blank	47890.01	47890.02	47890.03	47890.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	0.570J	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	0.540J	1.08	0.780J
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	1.22	1.96	1.49
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	0.510J	1.26	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	10.7	81.0	161	87.1
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0619081A1

Our Lab I.D.			Method Blank	47890.01	47890.02	47890.03	47890.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	47890.01	47890.02	47890.03	47890.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		110	117	116	119	109
Dibromofluoromethane	75-125		86.2	84.9	87.5	87.5	83.9
Toluene-d8	75-125		118	119	120	116	118



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.05	47890.06	47890.07	47890.08	47890.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			06/13/2008	06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	2.50	1.41	0.520J	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.05	47890.06	47890.07	47890.08	47890.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			06/13/2008	06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	1.18	15.8	11.0	3.70	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0619081A1

Our Lab I.D.			47890.05	47890.06	47890.07	47890.08	47890.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			06/13/2008	06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/19/2008	06/19/2008	06/19/2008	06/19/2008	06/19/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			47890.05	47890.06	47890.07	47890.08	47890.09
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		100	120	110	108	114
Dibromofluoromethane	75-125		87.7	87.8	85.9	80.4	86.2
Toluene-d8	75-125		112	120	119	120	119



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.10	47890.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			06/13/2008	06/13/2008		
Date Prepared			06/19/2008	06/19/2008		
Preparation Method			5030B	5030B		
Date Analyzed			06/19/2008	06/19/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Acetone	10	10	ND	ND		
Benzene	0.5	1.0	ND	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND		
Bromochloromethane	0.5	1.0	ND	ND		
Bromodichloromethane	0.5	1.0	ND	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND		
2-Butanone (MEK)	5.0	5.0	ND	ND		
n-Butylbenzene	0.5	1.0	ND	ND		
sec-Butylbenzene	0.5	1.0	ND	ND		
tert-Butylbenzene	0.5	1.0	ND	ND		
Carbon Disulfide	0.5	1.0	ND	ND		
Carbon tetrachloride	0.5	1.0	ND	ND		
Chlorobenzene	0.5	1.0	ND	ND		
Chloroethane	1.5	3.0	ND	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND		
2-Chlorotoluene	0.5	1.0	ND	ND		
4-Chlorotoluene	0.5	1.0	ND	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND		
Dibromochloromethane	0.5	1.0	ND	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND		
Dibromomethane	0.5	1.0	ND	ND		
1,2-Dichlorobenzene	0.5	1.0	ND	ND		
1,3-Dichlorobenzene	0.5	1.0	ND	ND		
1,4-Dichlorobenzene	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 9

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.10	47890.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			06/13/2008	06/13/2008		
Date Prepared			06/19/2008	06/19/2008		
Preparation Method			5030B	5030B		
Date Analyzed			06/19/2008	06/19/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Dichlorodifluoromethane	1.5	3.0	ND	ND		
1,1-Dichloroethane	0.5	1.0	ND	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND		
1,1-Dichloroethene	0.5	1.0	ND	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND	ND		
1,2-Dichloropropane	0.5	1.0	ND	ND		
1,3-Dichloropropane	0.5	1.0	ND	ND		
2,2-Dichloropropane	0.5	1.0	ND	ND		
1,1-Dichloropropene	0.5	1.0	ND	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND	ND		
Ethylbenzene	0.5	1.0	ND	ND		
Hexachlorobutadiene	1.5	3.0	ND	ND		
2-Hexanone	2.5	5.0	ND	ND		
Isopropylbenzene	0.5	1.0	ND	ND		
p-Isopropyltoluene	0.5	1.0	ND	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND		
Methylene chloride (DCM)	2.0	4.0	ND	ND		
Naphthalene	0.5	1.0	ND	ND		
n-Propylbenzene	0.5	1.0	ND	ND		
Styrene	0.5	1.0	ND	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND		
Tetrachloroethene	0.5	1.0	ND	ND		
Toluene (Methyl benzene)	0.5	1.0	ND	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND		
1,1,1-Trichloroethane	0.5	1.0	ND	ND		
1,1,2-Trichloroethane	0.5	1.0	ND	ND		
Trichloroethene	0.5	1.0	ND	ND		
Trichlorofluoromethane	0.5	1.0	ND	ND		
1,2,3-Trichloropropane	0.5	1.0	ND	ND		
			1			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 10

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0619081A1

Our Lab I.D.			47890.10	47890.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			06/13/2008	06/13/2008		
Date Prepared			06/19/2008	06/19/2008		
Preparation Method			5030B	5030B		
Date Analyzed			06/19/2008	06/19/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND		
Vinyl Acetate	0.5	5.0	ND	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND		
o-Xylene	0.5	1.0	ND	ND		
m,p-Xylenes	1.0	2.0	ND	ND		
Our Lab I.D.			47890.10	47890.11		
Surrogates	%Rec.Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		117	107		
Dibromofluoromethane	75-125		87.8	89.7		
Toluene-d8	75-125		109	113		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 11

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			Method Blank	47890.12	47890.13	47890.14	47890.15
Client Sample I.D.				ST3-10PDS	ST5-2PDS	ST5-4PDS	ST5-7PDS
Date Sampled				06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 12

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			Method Blank	47890.12	47890.13	47890.14	47890.15
Client Sample I.D.				ST3-10PDS	ST5-2PDS	ST5-4PDS	ST5-7PDS
Date Sampled				06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	1.38	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 13

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0620081A1

Our Lab I.D.			Method Blank	47890.12	47890.13	47890.14	47890.15
Client Sample I.D.				ST3-10PDS	ST5-2PDS	ST5-4PDS	ST5-7PDS
Date Sampled				06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed Matrix Units Dilution Factor			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
			ug/L	ug/L	ug/L	ug/L	ug/L
			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	47890.12	47890.13	47890.14	47890.15
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		118	109	115	101	113
Dibromofluoromethane	75-125		90.0	89.4	91.5	87.4	87.0
Toluene-d8	75-125		112	108	118	113	117



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc.
301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 14

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.16	47890.17	47890.18	47890.19	47890.20
Client Sample I.D.			ST5-10PDS	NT5-2PDS	NT5-4PDS	NT5-6PDS	NT5-8PDS
Date Sampled			06/13/2008	06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 15

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.16	47890.17	47890.18	47890.19	47890.20
Client Sample I.D.			ST5-10PDS	NT5-2PDS	NT5-4PDS	NT5-6PDS	NT5-8PDS
Date Sampled			06/13/2008	06/13/2008	06/13/2008	06/13/2008	06/13/2008
Date Prepared			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			06/20/2008	06/20/2008	06/20/2008	06/20/2008	06/20/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

ANALYTICAL RESULTS

Page: 16

Toluene-d8

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0620081A1 Our Lab I.D. 47890.16 47890.17 47890.18 47890.19 47890.20 Client Sample I.D. ST5-10PDS NT5-2PDS NT5-4PDS NT5-6PDS NT5-8PDS 06/13/2008 06/13/2008 06/13/2008 06/13/2008 06/13/2008 Date Sampled 06/20/2008 06/20/2008 06/20/2008 06/20/2008 06/20/2008 Date Prepared 5030B 5030B 5030B 5030B 5030B Preparation Method 06/20/2008 06/20/2008 06/20/2008 06/20/2008 06/20/2008 Date Analyzed Matrix Aqueous Aqueous Aqueous Aqueous Aqueous Units ug/L ug/L ug/L ug/L ug/L **Dilution Factor** Analytes **PQL** Results Results Results Results Results MDL 0.5 1.0 ND 1,2,4-Trimethylbenzene ND ND ND ND 0.5 1.0 ND ND 1,3,5-Trimethylbenzene ND ND ND Vinyl Acetate 0.5 5.0 ND ND ND ND ND Vinyl chloride (Chloroethene) 0.5 3.0 ND ND ND ND ND 0.5 1.0 ND ND ND ND ND o-Xylene 1.0 2.0 ND ND ND ND ND m,p-Xylenes Our Lab I.D. 47890.16 47890.17 47890.18 47890.19 47890.20 Surrogates %Rec.Limit % Rec. % Rec. % Rec. % Rec. % Rec. 75-125 104 104 101 91.4 109 Bromofluorobenzene 75-125 86.5 88.0 86.8 89.9 87.1 Dibromofluoromethane 75-125 113 112 116 115 119



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 17

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Our Lab I.D.			47890.21	47890.22		
Client Sample I.D.			NT6-2PDS	NT6-4PDS		
Date Sampled			06/13/2008	06/13/2008		
Date Prepared			06/20/2008	06/20/2008		
Preparation Method			5030B	5030B		
Date Analyzed			06/20/2008	06/20/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Acetone	10	10	ND	ND		
Benzene	0.5	1.0	ND	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND		
Bromochloromethane	0.5	1.0	ND	ND		
Bromodichloromethane	0.5	1.0	ND	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND		
2-Butanone (MEK)	5.0	5.0	ND	ND		
n-Butylbenzene	0.5	1.0	ND	ND		
sec-Butylbenzene	0.5	1.0	ND	ND		
tert-Butylbenzene	0.5	1.0	ND	ND		
Carbon Disulfide	0.5	1.0	ND	ND		
Carbon tetrachloride	0.5	1.0	ND	ND		
Chlorobenzene	0.5	1.0	ND	ND		
Chloroethane	1.5	3.0	ND	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND		
2-Chlorotoluene	0.5	1.0	ND	ND		
4-Chlorotoluene	0.5	1.0	ND	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND		
Dibromochloromethane	0.5	1.0	ND	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND		
Dibromomethane	0.5	1.0	ND	ND		
1,2-Dichlorobenzene	0.5	1.0	ND	ND		
1,3-Dichlorobenzene	0.5	1.0	ND	ND		
1,4-Dichlorobenzene	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 18

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) $\,$ QC Batch No: 0620081A1

Our Lab I.D.			47890.21	47890.22		
Client Sample I.D.			NT6-2PDS	NT6-4PDS		
Date Sampled	Date Sampled		06/13/2008	06/13/2008		
Date Prepared	Date Prepared			06/20/2008		
Preparation Method			5030B	5030B		
Date Analyzed			06/20/2008	06/20/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Dichlorodifluoromethane	1.5	3.0	ND	ND		
1,1-Dichloroethane	0.5	1.0	ND	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND		
1,1-Dichloroethene	0.5	1.0	ND	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND	ND		
1,2-Dichloropropane	0.5	1.0	ND	ND		
1,3-Dichloropropane	0.5	1.0	ND	ND		
2,2-Dichloropropane	0.5	1.0	ND	ND		
1,1-Dichloropropene	0.5	1.0	ND	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND	ND		
Ethylbenzene	0.5	1.0	ND	ND		
Hexachlorobutadiene	1.5	3.0	ND	ND		
2-Hexanone	2.5	5.0	ND	ND		
Isopropylbenzene	0.5	1.0	ND	ND		
p-Isopropyltoluene	0.5	1.0	ND	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND		
Methylene chloride (DCM)	2.0	4.0	ND	ND		
Naphthalene	0.5	1.0	ND	ND		
n-Propylbenzene	0.5	1.0	ND	ND		
Styrene	0.5	1.0	ND	ND		
1,1,2-Tetrachloroethane	0.5	1.0	ND	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND		
Tetrachloroethene	0.5	1.0	ND	ND		
Toluene (Methyl benzene)	0.5	1.0	ND	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND		
1,1,1-Trichloroethane	0.5	1.0	ND	ND		
1,1,2-Trichloroethane	0.5	1.0	ND	ND		
Trichloroethene	0.5	1.0	ND	ND		
Trichlorofluoromethane	0.5	1.0	ND	ND		
1,2,3-Trichloropropane	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 19

Project ID: 21384-03

Project Name: EPA Streams TO-65

 AETL Job Number
 Submitted
 Client

 47890
 06/17/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0620081A1

Our Lab I.D.			47890.21	47890.22		
Client Sample I.D.	Client Sample I.D.			NT6-4PDS		
Date Sampled			06/13/2008	06/13/2008		
Date Prepared			06/20/2008	06/20/2008		
Preparation Method			5030B	5030B		
Date Analyzed			06/20/2008	06/20/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND		
Vinyl Acetate	0.5	5.0	ND	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND		
o-Xylene	0.5	1.0	ND	ND		
m,p-Xylenes	1.0	2.0	ND	ND		
Our Lab I.D.			47890.21	47890.22		
Surrogates	%Rec.Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		97.6	103		
Dibromofluoromethane	75-125		85.1	88.0		
Toluene-d8	75-125		107	118		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc.
301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 20

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0621081A2

Our Lab I.D.			Method Blank	47890.23	47890.24	47890.25	
Client Sample I.D.	Client Sample I.D.			NT6-6PDS	NT6-8PDS	TB1-PDS	
Date Sampled				06/13/2008	06/13/2008	06/13/2008	
Date Prepared			06/21/2008	06/21/2008	06/21/2008	06/21/2008	
Preparation Method	Preparation Method		5030B	5030B	5030B	5030B	
Date Analyzed			06/21/2008	06/21/2008	06/21/2008	06/21/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	10	10	ND	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 21

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0621081A2

Our Lab I.D.			Method Blank	47890.23	47890.24	47890.25	
Client Sample I.D.				NT6-6PDS	NT6-8PDS	TB1-PDS	
Date Sampled				06/13/2008	06/13/2008	06/13/2008	
Date Prepared			06/21/2008	06/21/2008	06/21/2008	06/21/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			06/21/2008	06/21/2008	06/21/2008	06/21/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **22**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0621081A2

Our Lab I.D.			Method Blank	47890.23	47890.24	47890.25	
Client Sample I.D.				NT6-6PDS	NT6-8PDS	TB1-PDS	
Date Sampled				06/13/2008	06/13/2008	06/13/2008	
Date Prepared			06/21/2008	06/21/2008	06/21/2008	06/21/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			06/21/2008	06/21/2008	06/21/2008	06/21/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	47890.23	47890.24	47890.25	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		88.7	109	103	109	
Dibromofluoromethane	75-125		87.5	88.7	88.0	88.4	
Toluene-d8	75-125		113	104	117	111	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc.
301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 23

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0619081A1; Dup or Spiked Sample: B0619081A1; LCS: Clean Water; QC Prepared: 06/19/2008; QC Analyzed: 06/19/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	51.00	102	50.00	51.00	102	<1	75-125	<20
Chlorobenzene	0.0	50.00	47.90	95.8	50.00	47.90	95.8	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	45.30	90.6	50.00	45.40	90.8	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	52.00	104	50.00	49.00	98.0	5.94	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	49.40	98.8	50.00	50.00	100	1.21	75-125	<20
Trichloroethene	0.0	50.00	53.50	107	50.00	57.50	115	7.21	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	55.00	110	50.00	57.00	114	3.64	75-125	<20
Dibromofluoromethane	0.0	50.00	44.60	89.2	50.00	44.70	89.4	<1	75-125	<20
Toluene-d8	0.0	50.00	52.00	104	50.00	51.50	103	<1	75-125	<20

QC Batch No: 0619081A1; Dup or Spiked Sample: B0619081A1; LCS: Clean Water; QC Prepared: 06/19/2008; QC Analyzed: 06/19/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	51.00	102	75-125			
Chlorobenzene	50.00	49.30	98.6	75-125			
1,1-Dichloroethene	50.00	46.20	92.4	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	50.00	100	75-125			
Toluene (Methyl benzene)	50.00	50.50	101	75-125			
Trichloroethene	50.00	53.00	106	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	46.60	93.2	75-125			
Ethylbenzene	50.00	48.20	96.4	75-125			
1,1,1-Trichloroethane	50.00	53.50	107	75-125			
o-Xylene	50.00	49.20	98.4	75-125			
m,p-Xylenes	100.00	95.90	95.9	75-125			
Surrogates							
Bromofluorobenzene	50.00	54.50	109	75-125			
Dibromofluoromethane	50.00	44.35	88.7	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **24**

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 47890
 06/17/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0619081A1; Dup or Spiked Sample: B0619081A1; LCS: Clean Water; QC Prepared: 06/19/2008; QC Analyzed: 06/19/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	52.50	105	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

ANALYTICAL RESULTS

Ordered By

Site Tetra Tech Inc.

301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 James Elliot Attn: Page: 25

Project ID: 21384-03

Project Name: EPA Streams TO-65 Site 14 Lemoore NAS

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0620081A1; Dup or Spiked Sample: B0620081A1; LCS: Clean Water; QC Prepared: 06/20/2008; QC Analyzed: 06/20/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	49.00	98.0	50.00	47.60	95.2	2.90	75-125	<20
Chlorobenzene	0.0	50.00	47.80	95.6	50.00	46.00	92.0	3.84	75-125	<20
1,1-Dichloroethene	0.0	50.00	42.60	85.2	50.00	42.10	84.2	1.18	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	49.10	98.2	50.00	48.20	96.4	1.85	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	47.50	95.0	50.00	46.00	92.0	3.21	75-125	<20
Trichloroethene	0.0	50.00	55.00	110	50.00	62.00	124	12.0	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	47.05	94.1	50.00	48.20	96.4	2.44	75-125	<20
Dibromofluoromethane	0.0	50.00	43.55	87.1	50.00	43.15	86.3	<1	75-125	<20
Toluene-d8	0.0	50.00	54.50	109	50.00	54.50	109	<1	75-125	<20

QC Batch No: 0620081A1; Dup or Spiked Sample: B0620081A1; LCS: Clean Water; QC Prepared: 06/20/2008; QC Analyzed: 06/20/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	48.00	96.0	75-125			
Chlorobenzene	50.00	46.10	92.2	75-125			
1,1-Dichloroethene	50.00	41.40	82.8	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	49.80	99.6	75-125			
Toluene (Methyl benzene)	50.00	47.10	94.2	75-125			
Trichloroethene	50.00	49.60	99.2	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	40.50	81.0	75-125			
Ethylbenzene	50.00	42.20	84.4	75-125			
1,1,1-Trichloroethane	50.00	43.20	86.4	75-125			
o-Xylene	50.00	44.50	89.0	75-125			
m,p-Xylenes	100.00	85.00	85.0	75-125			
Surrogates							
Bromofluorobenzene	50.00	48.10	96.2	75-125			
Dibromofluoromethane	50.00	43.55	87.1	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840

ANALYTICAL RESULTS

Page: 26

Project ID: 21384-03 AETL Job Number

Submitted Client Project Name: EPA Streams TO-65 47890 06/17/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0620081A1; Dup or Spiked Sample: B0620081A1; LCS: Clean Water; QC Prepared: 06/20/2008; QC Analyzed: 06/20/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	54.50	109	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **27**

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
47890	06/17/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0621081A2; Dup or Spiked Sample: B0621081A2; LCS: Clean Water; QC Prepared: 06/21/2008; QC Analyzed: 06/21/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	49.80	99.6	50.00	51.00	102	2.4	75-125	<20
Chlorobenzene	0.0	50.00	49.60	99.2	50.00	49.20	98.4	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	49.40	98.8	50.00	49.70	99.4	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	49.80	99.6	50.00	49.70	99.4	<1	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	49.80	99.6	50.00	51.00	102	2.4	75-125	<20
Trichloroethene	0.0	50.00	56.50	113	50.00	59.50	119	5.2	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	47.05	94.1	50.00	48.20	96.4	2.4	75-125	<20
Dibromofluoromethane	0.0	50.00	43.55	87.1	50.00	43.15	86.3	<1	75-125	<20
Toluene-d8	0.0	50.00	54.50	109	50.00	54.50	109	<1	75-125	<20

QC Batch No: 0621081A2; Dup or Spiked Sample: B0621081A2; LCS: Clean Water; QC Prepared: 06/21/2008; QC Analyzed: 06/21/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	49.40	98.8	75-125			
Chlorobenzene	50.00	50.00	100	75-125			
1,1-Dichloroethene	50.00	49.50	99.0	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	50.00	100	75-125			
Toluene (Methyl benzene)	50.00	51.00	102	75-125			
Trichloroethene	50.00	58.00	116	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	43.60	87.2	75-125			
Ethylbenzene	50.00	51.00	102	75-125			
1,1,1-Trichloroethane	50.00	49.20	98.4	75-125			
o-Xylene	50.00	51.50	103	75-125			
m,p-Xylenes	100.00	101.00	101	75-125			
Surrogates							
Bromofluorobenzene	50.00	48.10	96.2	75-125			
Dibromofluoromethane	50.00	43.55	87.1	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 28

Project ID: 21384-03 AETL Job Number Submitted Client
Project Name: EPA Streams TO-65 47890 06/17/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0621081A2; Dup or Spiked Sample: B0621081A2; LCS: Clean Water; QC Prepared: 06/21/2008; QC Analyzed: 06/21/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	54.50	109	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111

Telephone: (805)681-3100 Attention: James Elliot Number of Pages 32

Date Received 07/24/2008
Date Reported 08/01/2008

Job Number	Order Date	Client
48398	07/24/2008	T/TSB

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site: Site 14 Lemoore NAS

Enclosed please find results of analyses of 25 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: _____ C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181

Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

Nº 52288

Hermanto TEST INSTRUCTIONS & COMMENTS 48398. 25 48398. 20 1961 48398.21 48398. 24 48398.23 Time: 11.55 48398. 10 48398.18 Page 2 of 2 က ternan 3042-60 RELINQUISHED BY: 07/24/08 RECEIVED BY LABORATORY: rinted Name Date: Ţij. Time; ANALYSIS REQUESTED 48398 RELINQUISHED BY: RECEIVED BY: rinted Name: Printed Name Signature: AETL JOB No. Time: | | | | Buch Time: &! Proman 9 1/0C² 8998 MS Date: 2.24-08 RELINQUISHED BY SAMPLER: PRES. 1 1 1 1 RECEIVED BY -3/08 A. G. 97111FAX 805-681-3100 Printed Nam \$1384-03 3 1/40M 110A CONTAINER NUMBER/SIZE James 2 DAYS PROJECT MANAGEB PROJECT SAMPLE RECEIPT - TO BE FILLED BY LABORATORY 12 of the MATRIX В ф PROPERLY COOLED / / /N / NA SAMPLES INTACT (Y/N / NA SAMPLES ACCEPTED /Y/N SAME DAY 13051 255 1235 TIME 1135 NAS 705 046 0/61 3/0 0,0 1300 TURN AROUND TIME こってい 80/62 em core DATE H ☐ RUSH Hentor Orive Stroms LAB ID **FOTAL NUMBER OF CONTAINERS** RECEIVED IN GOOD COND. (y') N CUSTODY SEALS Y (N) NA COMPANY ADDITESS I6-4PDS <u> 5049-9-</u> STS-10 PDS N76-2 PDS NT6-8 PDS 5.6 pns *-5-4*005 75-8PBS TB1 - PD5 SAMPLE ID NORMAL NORMAL PROJECT NAME SITE NAME AND ADDRESS

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

COMPANY ADDRESS

COMPANY

SAMPLE ID

SITE NAME AND

ADDRESS

American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181

Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

No 52289

TEST INSTRUCTIONS & COMMENTS 483%.04 48358 06 60 865RH 18398. 03 18398 05 48398.07 48398.08 4838.10 18398.15 Date: 7_28, 6Time: 11.55 18338.14 48398.01 51.8358h 48338.1 48398.1 Page L of က 48398. rowing RELINQUISHED BY: rinted Name: Time: 48398 **ANALYSIS REQUESTED** RELINQUISHED BY: rinted Name: AETL JOB No. 5)01 コージング Date: 7.2408 RELINQUISHED BY SAMPLER: C. 93/FAX 805-681-3108 PRES. VBA Na. 21384-03 **NUMBER/SIZE** CONTAINER JONES 1/10~/ PROJECT MANAGER SAMPLE RECEIPT - TO BE FILLED BY LABORATORY MATRIX とかなり NAS PO# 15 of 36 PROPERLY COOLED / JN / NA SAMPLES INTACT (Y/N / NA SAMPLES ACCEPTED (V) N 0.501 02 I 1435 0855 1030 1045 TIME 0840 1005 9/8 501 040/ 1000 13 Lemonre 80 70 GS DATE Ĭ 301 Mentor Drive LAB ID Streams TOTAL NUMBER OF CONTAINERS RECEIVED IN GOOD COND. (4) N CUSTODY SEALS Y (N) NA 9+CS STS-HPDS STS-7 PDS 2,2005 7005 2-10 ms 1-4105 3-10PX 5/1-2PDS PDS 73-2-PDS ST3-15 -10 PDS 573-4 805

May Hermanto

RECEIVED BY LABORATORS

RECEIVED BY:

RECEIVED BY:

Signature

1.55

107/24/08 Time:

Date:

ij j

5/30/

rinted Name

☐ 2 DAYS ☐ 3 DAYS

☐ SAME DAY

□ RUSH

M NORMAL

TURN AROUND TIME



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0725081A1

Our Lab I.D.			Method Blank	48398.01	48398.02	48398.03	48398.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	1.01	1.44	1.37
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0725081A1

Our Lab I.D.			Method Blank	48398.01	48398.02	48398.03	48398.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	0.580J	0.510J
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	1.03	0.930J
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	1.51	2.52	2.34
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	0.950J	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	12.7	82.4	169	115
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0725081A1

Our Lab I.D.			Method Blank	48398.01	48398.02	48398.03	48398.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	48398.01	48398.02	48398.03	48398.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		100	102	100	103	102
Dibromofluoromethane	75-125		95.6	91.6	95.8	94.3	95.2
Toluene-d8	75-125		96.7	98.7	96.9	97.6	96.2



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0725081A1

Our Lab I.D.			48398.05	48398.06	48398.07	48398.08	48398.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			07/23/2008	07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	1.69	1.79	0.670J	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0725081A1

Our Lab I.D.			48398.05	48398.06	48398.07	48398.08	48398.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			07/23/2008	07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	1.54	11.2	19.3	5.95	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0725081A1

Our Lab I.D.			48398.05	48398.06	48398.07	48398.08	48398.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			07/23/2008	07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/25/2008	07/25/2008	07/25/2008	07/25/2008	07/25/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			48398.05	48398.06	48398.07	48398.08	48398.09
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		101	103	105	109	110
Dibromofluoromethane	75-125		93.1	94.0	90.1	79.3	80.1
Toluene-d8	75-125		96.7	97.9	99.4	103	105



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Site

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0725081A1

Our Lab I.D.			48398.10	48398.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			07/23/2008	07/23/2008		
Date Prepared			07/25/2008	07/25/2008		
Preparation Method			5030B	5030B		
Date Analyzed			07/25/2008	07/25/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Acetone	10	10	ND	ND		
Benzene	0.5	1.0	ND	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND		
Bromochloromethane	0.5	1.0	ND	ND		
Bromodichloromethane	0.5	1.0	ND	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND		
2-Butanone (MEK)	5.0	5.0	ND	ND		
n-Butylbenzene	0.5	1.0	ND	ND		
sec-Butylbenzene	0.5	1.0	ND	ND		
tert-Butylbenzene	0.5	1.0	ND	ND		
Carbon Disulfide	0.5	1.0	ND	ND		
Carbon tetrachloride	0.5	1.0	ND	ND		
Chlorobenzene	0.5	1.0	ND	ND		
Chloroethane	1.5	3.0	ND	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND		
2-Chlorotoluene	0.5	1.0	ND	ND		
4-Chlorotoluene	0.5	1.0	ND	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND		
Dibromochloromethane	0.5	1.0	ND	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND		
Dibromomethane	0.5	1.0	ND	ND		
1,2-Dichlorobenzene	0.5	1.0	ND	ND		
1,3-Dichlorobenzene	0.5	1.0	ND	ND		
1,4-Dichlorobenzene	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 9

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0725081A1

Our Lab I.D.			48398.10	48398.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			07/23/2008	07/23/2008		
Date Prepared			07/25/2008	07/25/2008		
Preparation Method			5030B	5030B		
Date Analyzed			07/25/2008	07/25/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Dichlorodifluoromethane	1.5	3.0	ND	ND		
1,1-Dichloroethane	0.5	1.0	ND	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND		
1,1-Dichloroethene	0.5	1.0	ND	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND	ND		
1,2-Dichloropropane	0.5	1.0	ND	ND		
1,3-Dichloropropane	0.5	1.0	ND	ND		
2,2-Dichloropropane	0.5	1.0	ND	ND		
1,1-Dichloropropene	0.5	1.0	ND	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND	ND		
Ethylbenzene	0.5	1.0	ND	ND		
Hexachlorobutadiene	1.5	3.0	ND	ND		
2-Hexanone	2.5	5.0	ND	ND		
Isopropylbenzene	0.5	1.0	ND	ND		
p-Isopropyltoluene	0.5	1.0	ND	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND		
Methylene chloride (DCM)	2.0	4.0	ND	ND		
Naphthalene	0.5	1.0	ND	ND		
n-Propylbenzene	0.5	1.0	ND	ND		
Styrene	0.5	1.0	ND	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND		
Tetrachloroethene	0.5	1.0	ND	ND		
Toluene (Methyl benzene)	0.5	1.0	ND	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND		
1,1,1-Trichloroethane	0.5	1.0	ND	ND		
1,1,2-Trichloroethane	0.5	1.0	ND	ND		
Trichloroethene	0.5	1.0	ND	ND		
Trichlorofluoromethane	0.5	1.0	ND	ND		
1,2,3-Trichloropropane	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 10

Project ID: 21384-03

AETL Job Number Submitted Client Project Name: EPA Streams TO-65 48398 07/24/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0725081A1

Our Lab I.D.			48398.10	48398.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			07/23/2008	07/23/2008		
Date Prepared			07/25/2008	07/25/2008		
Preparation Method			5030B	5030B		
Date Analyzed			07/25/2008	07/25/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND		
Vinyl Acetate	0.5	5.0	ND	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND		
o-Xylene	0.5	1.0	ND	ND		
m,p-Xylenes	1.0	2.0	ND	ND		
Our Lab I.D.			48398.10	48398.11		
Surrogates	%Rec.Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		110	111		
Dibromofluoromethane	75-125		84.1	80.8		
Toluene-d8	75-125		106	111		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 11

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0726081A1

Our Lab I.D.			Method Blank	48398.12	48398.13	
Client Sample I.D.				ST3-10PDS	ST5-2PDS	
Date Sampled				07/23/2008	07/23/2008	
Date Prepared			07/26/2008	07/26/2008	07/26/2008	
Preparation Method			5030B	5030B	5030B	
Date Analyzed			07/26/2008	07/26/2008	07/26/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
Acetone	10	10	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **12**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0726081A1

Our Lab I.D.			Method Blank	48398.12	48398.13	
Client Sample I.D.				ST3-10PDS	ST5-2PDS	
Date Sampled				07/23/2008	07/23/2008	
Date Prepared			07/26/2008	07/26/2008	07/26/2008	
Preparation Method			5030B	5030B	5030B	
Date Analyzed			07/26/2008	07/26/2008	07/26/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	1.49	ND	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 13

Project ID: 21384-03

AETL Job Number Submitted Client Project Name: EPA Streams TO-65 48398 07/24/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0726081A1

Our Lab I.D.			Method Blank	48398.12	48398.13	
Client Sample I.D.			ST3-10PDS	ST5-2PDS		
Date Sampled				07/23/2008	07/23/2008	
Date Prepared			07/26/2008	07/26/2008	07/26/2008	
Preparation Method			5030B	5030B	5030B	
Date Analyzed			07/26/2008	07/26/2008	07/26/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	
Our Lab I.D.			Method Blank	48398.12	48398.13	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		102	103	108	
Dibromofluoromethane	75-125		94.0	94.0	82.1	
Toluene-d8	75-125		96.8	96.5	104	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 14

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0728081A1

Our Lab I.D.			Method Blank	48398.14	48398.15	48398.16	48398.17
Client Sample I.D.				ST5-4PDS	ST5-7PDS	ST5-10PDS	NT6-2PDS
Date Sampled				07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/28/2008	07/28/2008	07/28/2008	07/28/2008	07/28/2008
Preparation Method			5030B	5030B	5030B	5030B	5030В
Date Analyzed			07/28/2008	07/28/2008	07/28/2008	07/28/2008	07/28/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 15

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0728081A1

Our Lab I.D.			Method Blank	48398.14	48398.15	48398.16	48398.17
Client Sample I.D.				ST5-4PDS	ST5-7PDS	ST5-10PDS	NT6-2PDS
Date Sampled				07/23/2008	07/23/2008	07/23/2008	07/23/2008
Date Prepared			07/28/2008	07/28/2008	07/28/2008	07/28/2008	07/28/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			07/28/2008	07/28/2008	07/28/2008	07/28/2008	07/28/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **16**

Toluene-d8

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0728081A1

Our Lab I.D. Method Blank 48398.14 48398.15 48398.16 48398.17 Client Sample I.D. ST5-4PDS ST5-7PDS ST5-10PDS NT6-2PDS 07/23/2008 07/23/2008 Date Sampled 07/23/2008 07/23/2008 07/28/2008 07/28/2008 07/28/2008 07/28/2008 07/28/2008 Date Prepared 5030B 5030B 5030B 5030B 5030B Preparation Method 07/28/2008 07/28/2008 07/28/2008 07/28/2008 07/28/2008 Date Analyzed Matrix Aqueous Aqueous Aqueous Aqueous Aqueous Units ug/L ug/L ug/L ug/L ug/L **Dilution Factor** Analytes **PQL** Results Results Results Results Results MDL 0.5 1.0 1,2,4-Trimethylbenzene ND ND ND ND ND 0.5 1.0 ND ND 1,3,5-Trimethylbenzene ND ND ND Vinyl Acetate 0.5 5.0 ND ND ND ND ND Vinyl chloride (Chloroethene) 0.5 3.0 ND ND ND ND ND 0.5 1.0 ND ND ND ND ND o-Xylene 1.0 2.0 ND ND ND ND ND m,p-Xylenes Our Lab I.D. 48398.14 Method Blank 48398.15 48398.16 48398.17 Surrogates %Rec.Limit % Rec. % Rec. % Rec. % Rec. % Rec. 75-125 104 102 104 104 106 Bromofluorobenzene Dibromofluoromethane 75-125 88.6 88.0 84.5 82.8 82.5

105

106

109

112

117

75-125



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 17

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0728081A1

Our Lab I.D.			48398.18		
Client Sample I.D.			NT6-4PDS		
Date Sampled			07/23/2008		
Date Prepared			07/28/2008		
Preparation Method			5030B		
Date Analyzed			07/28/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
Acetone	10	10	ND		
Benzene	0.5	1.0	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND		
Bromochloromethane	0.5	1.0	ND		
Bromodichloromethane	0.5	1.0	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND		
2-Butanone (MEK)	5.0	5.0	ND		
n-Butylbenzene	0.5	1.0	ND		
sec-Butylbenzene	0.5	1.0	ND		
tert-Butylbenzene	0.5	1.0	ND		
Carbon Disulfide	0.5	1.0	ND		
Carbon tetrachloride	0.5	1.0	ND		
Chlorobenzene	0.5	1.0	ND		
Chloroethane	1.5	3.0	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND		
2-Chlorotoluene	0.5	1.0	ND		
4-Chlorotoluene	0.5	1.0	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND		
Dibromochloromethane	0.5	1.0	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND		
Dibromomethane	0.5	1.0	ND		
1,2-Dichlorobenzene	0.5	1.0	ND		
1,3-Dichlorobenzene	0.5	1.0	ND		
1,4-Dichlorobenzene	0.5	1.0	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 18

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0728081A1

Our Lab I.D.			48398.18		
Client Sample I.D.			NT6-4PDS		
Date Sampled			07/23/2008		
Date Prepared			07/28/2008		
Preparation Method			5030B		
Date Analyzed			07/28/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
Dichlorodifluoromethane	1.5	3.0	ND		
1,1-Dichloroethane	0.5	1.0	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND		
1,1-Dichloroethene	0.5	1.0	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND		
1,2-Dichloropropane	0.5	1.0	ND		
1,3-Dichloropropane	0.5	1.0	ND		
2,2-Dichloropropane	0.5	1.0	ND		
1,1-Dichloropropene	0.5	1.0	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND		
Ethylbenzene	0.5	1.0	ND		
Hexachlorobutadiene	1.5	3.0	ND		
2-Hexanone	2.5	5.0	ND		
Isopropylbenzene	0.5	1.0	ND		
p-Isopropyltoluene	0.5	1.0	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND		
Methylene chloride (DCM)	2.0	4.0	ND		
Naphthalene	0.5	1.0	ND		
n-Propylbenzene	0.5	1.0	ND		
Styrene	0.5	1.0	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND		
Tetrachloroethene	0.5	1.0	ND		
Toluene (Methyl benzene)	0.5	1.0	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND		
1,1,1-Trichloroethane	0.5	1.0	ND		
1,1,2-Trichloroethane	0.5	1.0	ND		
Trichloroethene	0.5	1.0	ND		
Trichlorofluoromethane	0.5	1.0	ND		
1,2,3-Trichloropropane	0.5	1.0	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **19**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0728081A1 Our Lab I.D. 48398.18 Client Sample I.D. NT6-4PDS 07/23/2008 Date Sampled 07/28/2008 Date Prepared Preparation Method 5030B 07/28/2008 Date Analyzed Matrix Aqueous Units ug/L **Dilution Factor** 1 Analytes Results MDL **PQL** 1,2,4-Trimethylbenzene 0.5 1.0 ND 1,3,5-Trimethylbenzene 0.5 1.0 ND Vinyl Acetate 0.5 5.0 ND Vinyl chloride (Chloroethene) 3.0 0.5 ND 0.5 1.0 ND o-Xylene m,p-Xylenes 1.0 2.0 ND Our Lab I.D. 48398.18 Surrogates %Rec.Limit % Rec. 75-125 105 Bromofluorobenzene Dibromofluoromethane 75-125 80.7 Toluene-d8 75-125 119



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 20

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0726081A1

Our Lab I.D.			48398.19		
Client Sample I.D.			NT6-6PDS		
Date Sampled			07/23/2008		
Date Prepared			07/26/2008		
Preparation Method			5030B		
Date Analyzed			07/26/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
Acetone	10	10	ND		
Benzene	0.5	1.0	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND		
Bromochloromethane	0.5	1.0	ND		
Bromodichloromethane	0.5	1.0	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND		
2-Butanone (MEK)	5.0	5.0	ND		
n-Butylbenzene	0.5	1.0	ND		
sec-Butylbenzene	0.5	1.0	ND		
tert-Butylbenzene	0.5	1.0	ND		
Carbon Disulfide	0.5	1.0	ND		
Carbon tetrachloride	0.5	1.0	ND		
Chlorobenzene	0.5	1.0	ND		
Chloroethane	1.5	3.0	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND		
2-Chlorotoluene	0.5	1.0	ND		
4-Chlorotoluene	0.5	1.0	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND		
Dibromochloromethane	0.5	1.0	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND		
Dibromomethane	0.5	1.0	ND		
1,2-Dichlorobenzene	0.5	1.0	ND		
1,3-Dichlorobenzene	0.5	1.0	ND		
1,4-Dichlorobenzene	0.5	1.0	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 21

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0726081A1

Our Lab I.D.			48398.19		
Client Sample I.D.			NT6-6PDS		
Date Sampled			07/23/2008		
Date Prepared			07/26/2008		
Preparation Method			5030B		
Date Analyzed			07/26/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
Dichlorodifluoromethane	1.5	3.0	ND		
1,1-Dichloroethane	0.5	1.0	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND		
1,1-Dichloroethene	0.5	1.0	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND		
1,2-Dichloropropane	0.5	1.0	ND		
1,3-Dichloropropane	0.5	1.0	ND		
2,2-Dichloropropane	0.5	1.0	ND		
1,1-Dichloropropene	0.5	1.0	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND		
Ethylbenzene	0.5	1.0	ND		
Hexachlorobutadiene	1.5	3.0	ND		
2-Hexanone	2.5	5.0	ND		
Isopropylbenzene	0.5	1.0	ND		
p-Isopropyltoluene	0.5	1.0	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND		
Methylene chloride (DCM)	2.0	4.0	ND		
Naphthalene	0.5	1.0	ND		
n-Propylbenzene	0.5	1.0	ND		
Styrene	0.5	1.0	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND		
Tetrachloroethene	0.5	1.0	ND		
Toluene (Methyl benzene)	0.5	1.0	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND		
1,1,1-Trichloroethane	0.5	1.0	ND		
1,1,2-Trichloroethane	0.5	1.0	ND		
Trichloroethene	0.5	1.0	ND		
Trichlorofluoromethane	0.5	1.0	ND		
1,2,3-Trichloropropane	0.5	1.0	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **22**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0726081A1

Our Lab I.D.			48398.19		
Client Sample I.D.			NT6-6PDS		
Date Sampled			07/23/2008		
Date Prepared			07/26/2008		
Preparation Method			5030B		
Date Analyzed			07/26/2008		
Matrix			Aqueous		
Units			ug/L		
Dilution Factor			1		
Analytes	MDL	PQL	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND		
Vinyl Acetate	0.5	5.0	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND		
o-Xylene	0.5	1.0	ND		
m,p-Xylenes	1.0	2.0	ND		
Our Lab I.D.			48398.19		
Surrogates	%Rec.Limit		% Rec.		
Bromofluorobenzene	75-125		119		
Dibromofluoromethane	75-125		74.5		
Toluene-d8	75-125		120		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 23

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846) QC Batch No: 0728081A1

Our Lab I.D.			48398.20	48398.21	48398.22	
Client Sample I.D.			NT6-8PDS	NT5-2PDS	NT5-4PDS	
Date Sampled		07/23/2008	07/23/2008	07/23/2008		
Date Prepared		07/28/2008	07/28/2008	07/28/2008		
Preparation Method		5030B	5030B	5030B		
Date Analyzed		07/28/2008	07/28/2008	07/28/2008		
Matrix Units Dilution Factor			Aqueous	Aqueous	Aqueous	
			ug/L	ug/L	ug/L	
			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
Acetone	10	10	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 24

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Our Lab I.D.			48398.20	48398.21	48398.22	
Client Sample I.D.			NT6-8PDS	NT5-2PDS	NT5-4PDS	
Date Sampled			07/23/2008	07/23/2008	07/23/2008	
Date Prepared	Date Prepared		07/28/2008	07/28/2008	07/28/2008	
Preparation Method			5030B	5030B	5030B	
Date Analyzed			07/28/2008	07/28/2008	07/28/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	ND	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **25**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0728081A1

Our Lab I.D.			48398.20	48398.21	48398.22	
Client Sample I.D.	Client Sample I.D.			NT5-2PDS	NT5-4PDS	
Date Sampled			07/23/2008	07/23/2008	07/23/2008	
Date Prepared			07/28/2008	07/28/2008	07/28/2008	
Preparation Method			5030B	5030B	5030B	
Date Analyzed			07/28/2008	07/28/2008	07/28/2008	
Matrix			Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	
Analytes	MDL	PQL	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	
Our Lab I.D.			48398.20	48398.21	48398.22	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		107	108	112	
Dibromofluoromethane	75-125		85.1	83.8	78.8	
Toluene-d8	75-125		108	109	116	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: **26**

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Our Lab I.D.			Method Blank	48398.23	48398.24	48398.25	
Client Sample I.D.				NT5-6PDS	NT5-8PDS	TB1-PDS	
Date Sampled				07/23/2008	07/23/2008	07/23/2008	
Date Prepared	Date Prepared		07/29/2008	07/29/2008	07/29/2008	07/29/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			07/29/2008	07/29/2008	07/29/2008	07/29/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	10	10	ND	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **27**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Our Lab I.D.			Method Blank	48398.23	48398.24	48398.25	
Client Sample I.D.				NT5-6PDS	NT5-8PDS	TB1-PDS	
Date Sampled				07/23/2008	07/23/2008	07/23/2008	
Date Prepared			07/29/2008	07/29/2008	07/29/2008	07/29/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			07/29/2008	07/29/2008	07/29/2008	07/29/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	
2-Hexanone	2.5	5.0	ND	ND	ND	ND	
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	
Naphthalene	0.5	1.0	ND	ND	ND	ND	
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	
Styrene	0.5	1.0	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	
Trichloroethene	0.5	1.0	ND	ND	ND	ND	
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	
1,2,3-1 ficilioropropane	0.5	1.0	עאַז	IAD.	שא	עאַז	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 28

Project ID: 21384-03

AETL Job Number Submitted Client Project Name: EPA Streams TO-65 48398 07/24/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0729081A1

Our Lab I.D.			Method Blank	48398.23	48398.24	48398.25	
Client Sample I.D.			NT5-6PDS	NT5-8PDS	TB1-PDS		
Date Sampled				07/23/2008	07/23/2008	07/23/2008	
Date Prepared			07/29/2008	07/29/2008	07/29/2008	07/29/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			07/29/2008	07/29/2008	07/29/2008	07/29/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	48398.23	48398.24	48398.25	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		101	108	114	102	
Dibromofluoromethane	75-125		88.9	85.6	80.2	90.7	
Toluene-d8	75-125		107	114	119	106	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 29

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0725081A1; Dup or Spiked Sample: B0725081A1; LCS: Clean Water; QC Prepared: 07/25/2008; QC Analyzed: 07/25/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	47.40	94.8	50.00	46.90	93.8	1.06	75-125	<20
Chlorobenzene	0.0	50.00	45.40	90.8	50.00	43.60	87.2	4.04	75-125	<20
1,1-Dichloroethene	0.0	50.00	49.90	99.8	50.00	48.50	97.0	2.85	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	41.80	83.6	50.00	40.00	80.0	4.40	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	53.00	106	50.00	50.50	101	4.83	75-125	<20
Trichloroethene	0.0	50.00	51.00	102	50.00	52.50	105	2.90	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	49.10	98.2	50.00	49.95	99.9	1.73	75-125	<20
Dibromofluoromethane	0.0	50.00	41.60	83.2	50.00	38.60	77.2	7.21	75-125	<20
Toluene-d8	0.0	50.00	54.50	109	50.00	53.50	107	1.83	75-125	<20

QC Batch No: 0725081A1; Dup or Spiked Sample: B0725081A1; LCS: Clean Water; QC Prepared: 07/25/2008; QC Analyzed: 07/25/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	46.80	93.6	75-125			
Chlorobenzene	50.00	44.50	89.0	75-125			
1,1-Dichloroethene	50.00	48.30	96.6	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	38.60	77.2	75-125			
Toluene (Methyl benzene)	50.00	53.00	106	75-125			
Trichloroethene	50.00	54.50	109	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	41.20	82.4	75-125			
Ethylbenzene	50.00	52.50	105	75-125			
1,1,1-Trichloroethane	50.00	54.00	108	75-125			
o-Xylene	50.00	48.70	97.4	75-125			
m,p-Xylenes	100.00	105.00	105	75-125			
Surrogates							
Bromofluorobenzene	50.00	51.00	102	75-125			
Dibromofluoromethane	50.00	39.55	79.1	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: **30**

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 48398
 07/24/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0725081A1; Dup or Spiked Sample: B0725081A1; LCS: Clean Water; QC Prepared: 07/25/2008; QC Analyzed: 07/25/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	56.00	112	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: **31**

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0726081A1; Dup or Spiked Sample: B0726081A1; LCS: Clean Water; QC Prepared: 07/26/2008; QC Analyzed: 07/26/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	48.30	96.6	50.00	48.30	96.6	<1	75-125	<20
Chlorobenzene	0.0	50.00	46.30	92.6	50.00	47.20	94.4	1.93	75-125	<20
1,1-Dichloroethene	0.0	50.00	55.50	111	50.00	54.00	108	2.74	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	37.80	75.6	50.00	37.30	74.6	1.33	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	59.00	118	50.00	58.50	117	<1	75-125	<20
Trichloroethene	0.0	50.00	48.40	96.8	50.00	54.50	109	11.9	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	49.10	98.2	50.00	48.55	97.1	1.12	75-125	<20
Dibromofluoromethane	0.0	50.00	39.20	78.4	50.00	41.75	83.5	6.51	75-125	<20
Toluene-d8	0.0	50.00	59.00	118	50.00	58.50	117	<1	75-125	<20

QC Batch No: 0726081A1; Dup or Spiked Sample: B0726081A1; LCS: Clean Water; QC Prepared: 07/26/2008; QC Analyzed: 07/26/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	46.10	92.2	75-125			
Chlorobenzene	50.00	44.80	89.6	75-125			
1,1-Dichloroethene	50.00	55.00	110	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	37.50	75.0	75-125			
Toluene (Methyl benzene)	50.00	41.00	82.0	75-125			
Trichloroethene	50.00	50.50	101	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	39.10	78.2	75-125			
Ethylbenzene	50.00	40.80	81.6	75-125			
1,1,1-Trichloroethane	50.00	50.50	101	75-125			
o-Xylene	50.00	44.30	88.6	75-125			
m,p-Xylenes	100.00	82.10	82.1	75-125			
Surrogates							
Bromofluorobenzene	50.00	50.00	100	75-125			
Dibromofluoromethane	50.00	40.70	81.4	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: **32**

Project ID: 21384-03 AETL Job Number Submitted Client
Project Name: EPA Streams TO-65 48398 07/24/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0726081A1; Dup or Spiked Sample: B0726081A1; LCS: Clean Water; QC Prepared: 07/26/2008; QC Analyzed: 07/26/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	43.25	86.5	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: **33**

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0728081A1; Dup or Spiked Sample: B0728081A1; LCS: Clean Water; QC Prepared: 07/28/2008; QC Analyzed: 07/28/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	47.40	94.8	50.00	47.20	94.4	<1	75-125	<20
Chlorobenzene	0.0	50.00	49.40	98.8	50.00	50.00	100	1.2	75-125	<20
1,1-Dichloroethene	0.0	50.00	48.80	97.6	50.00	50.00	100	2.4	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	40.90	81.8	50.00	44.00	88.0	7.3	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	54.50	109	50.00	55.00	110	<1	75-125	<20
Trichloroethene	0.0	50.00	49.10	98.2	50.00	48.70	97.4	<1	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	48.35	96.7	50.00	48.50	97.0	<1	75-125	<20
Dibromofluoromethane	0.0	50.00	41.00	82.0	50.00	40.65	81.3	<1	75-125	<20
Toluene-d8	0.0	50.00	56.00	112	50.00	56.00	112	<1	75-125	<20

QC Batch No: 0728081A1; Dup or Spiked Sample: B0728081A1; LCS: Clean Water; QC Prepared: 07/28/2008; QC Analyzed: 07/28/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	46.30	92.6	75-125			
Chlorobenzene	50.00	51.00	102	75-125			
1,1-Dichloroethene	50.00	49.50	99.0	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	38.20	76.4	75-125			
Toluene (Methyl benzene)	50.00	54.50	109	75-125			
Trichloroethene	50.00	52.00	104	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	40.60	81.2	75-125			
Ethylbenzene	50.00	52.50	105	75-125			
1,1,1-Trichloroethane	50.00	56.00	112	75-125			
o-Xylene	50.00	56.00	112	75-125			
m,p-Xylenes	100.00	113.00	113	75-125			
Surrogates							
Bromofluorobenzene	50.00	49.90	99.8	75-125			
Dibromofluoromethane	50.00	38.75	77.5	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: **34**

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 48398
 07/24/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0728081A1; Dup or Spiked Sample: B0728081A1; LCS: Clean Water; QC Prepared: 07/28/2008; QC Analyzed: 07/28/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	51.50	103	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111

Telephone: (805)681-3100 Attn: James Elliot Page: 35

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48398	07/24/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QUALITY CONTROL REPORT

QC Batch No: 0729081A1; Dup or Spiked Sample: B0729081A1; LCS: Clean Water; QC Prepared: 07/29/2008; QC Analyzed: 07/29/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	46.70	93.4	50.00	46.80	93.6	<1	75-125	<20
Chlorobenzene	0.0	50.00	50.50	101	50.00	50.50	101	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	49.10	98.2	50.00	48.90	97.8	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	38.70	77.4	50.00	39.40	78.8	1.79	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	51.50	103	50.00	50.50	101	1.96	75-125	<20
Trichloroethene	0.0	50.00	43.60	87.2	50.00	43.80	87.6	<1	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	44.80	89.6	50.00	44.85	89.7	<1	75-125	<20
Dibromofluoromethane	0.0	50.00	44.75	89.5	50.00	45.65	91.3	2.01	75-125	<20
Toluene-d8	0.0	50.00	53.00	106	50.00	52.50	105	<1	75-125	<20

QC Batch No: 0729081A1; Dup or Spiked Sample: B0729081A1; LCS: Clean Water; QC Prepared: 07/29/2008; QC Analyzed: 07/29/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	46.60	93.2	75-125			
Chlorobenzene	50.00	48.60	97.2	75-125			
1,1-Dichloroethene	50.00	49.20	98.4	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	39.30	78.6	75-125			
Toluene (Methyl benzene)	50.00	50.00	100	75-125			
Trichloroethene	50.00	51.00	102	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	41.10	82.2	75-125			
Ethylbenzene	50.00	49.30	98.6	75-125			
1,1,1-Trichloroethane	50.00	48.30	96.6	75-125			
o-Xylene	50.00	50.50	101	75-125			
m,p-Xylenes	100.00	102.00	102	75-125			
Surrogates							
Bromofluorobenzene	50.00	44.90	89.8	75-125			
Dibromofluoromethane	50.00	44.85	89.7	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Tetra Tech Inc.

301 Mentor Drive Suite "A" Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attention: James Elliot Number of Pages 25

Date Received 08/27/2008
Date Reported 09/11/2008

Job Number	Order Date	Client
48929	08/27/2008	T/TSB

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site: Site 14 Lemoore NAS

Enclosed please find results of analyses of 25 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: _____ C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director



AIIICATICALI ELIVITORIIICALICAL LOSUIIIS ELACOLARIO JANO. 2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

Nº 52290

COMPANY	1		PROJ	PROJECT MANAGER	EB.	4		AETL JOB No.	コマタクロ		Page	- o 0
letra	cch			amo	ames Ellist	٤ ر	1		12 / 12			
COMPANY ADDRESS			,		802-(81-3	001		ANALY	ANALYSIS REQUESTED	GD CD	TEST INSTRUCTIONS & COMMENTS	& COMMENTS
301 Menter Dr. Swite A. Santa Barbara CA 93111	A Sant	2 Broke	G 9311.		805-681-3	.108						
PROJECT NAME FPA ST	STREAMS	TO 65		1	PROJECT # 2 384 - 03		570					
			NAS	. # Od	<u>.</u>		ν					
RESS))				99					
SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	R PRES.	Z8NS					
1 ST1-2PDS	8	8/26/08	0715	Water	for Judy (1)	NO4 Na, 700	~				3h	48929.01
2 5TI-4PDS		-			_	L	X				} ሉ	48929.02
ST1-7PB			3210				X				3h	48929.03
ST1-10 PDS			0730				Χ				አ	
\$ 572-2705		_	0745				X				h	
ST2-4 PDS	:		0520				X				7	48929.06
572-7705			\$32.9				X				አ	18929.03
\$ 572 - 10 PB			0080				X				,	48929.08
\$ ST3-2 PDS			Q1&0				X					48929.00
" ST3-4 PDS			5189				X				د.	48929.10
" ST3-7PDS			9280				X		-)	46929.11
" ST3-10 PDS			5280				X					48929 12
" STS-2 PDS			5880				X					1889.13
275-4 PDS			9480				X				i	48939.14
ST5-7 PDS		\	5480	->	→	\rightarrow	X					48929.15
SAMPLE RECEIPT		- TO BE FILLED BY LABORATO	BY LAB	ORATOR	RY S.	RELINQUISHED BY SAMPLER:) BY	1.	RELINQUISHED BY:	,; .;	RELINQUISHED BY:	3.
TOTAL NUMBER OF CONTAINERS	s 15		PROPERLY COOLED (Y) N / NA	V/N/NA	Ø	Signature:	3	water	Signature:		Signature:	
CUSTODY SEALS (Y) N / NA			SAMPLES INTACT YN / NA	N / NA	Ġ.	Printed Name: Chris	(د	Tas M	Printed Name:		Printed Name: Ted 8%	Š
RECEIVED IN GOOD COND.	2	SAMPLES	SAMPLES ACCEPTED (Y) N	N N	<u> </u>	Date: 8/27/08	. Time:	0051	Date:	Time	Date:	тіте:
		TURN AROUND TIME	l W		E	RECEIVED BY:)	RECEIVED BY:	2.	RECEIVED BY LABORATORY:	ъ.
	·		אינו שייט ר			Signature:			Signature:		Signature:	
NORMAL	RUSH		□ NEXT DAY		3 DAYS	Printed Name:			Printed Name	i	Printed Name: Aduly	\mathcal{I}
					Ē'.	Date:	Time:		Date:	Tíme:	Date: 08/24/08	Time: 120 O.



2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

CHAIN OF CUSTODY RECORD

Nº 52291

53 filther Hermanto TEST INSTRUCTIONS & COMMENTS 20 48929.24 48929, 25 8 2 18925 18 Page 2 of 2 က် က 48929. 48929. 2822. 48929. 48929 48929 48929 Time: 80/E3/RO RELINQUISHED BY: RECEIVED BY Printed Name: Date: તં તાં íme: **ANALYSIS REQUESTED** RELINQUISHED BY: H8920 RECEIVED BY: rinted Name rinted Nam Date: AETL JOB No. 1500 to 56 501 0928 MS とこそ Date: 8/21/08 RELINGUISHED BY SAMPLER: Na, Poy PRES. 光に RECEIVED BY: Printed Name: rinted Name Signature: CA 93111 FAX 805 - 681-3108 PROJECT MANAGER Ellist
PHONE 805-681-3100 **₹**% CONTAINER NUMBER/SIZE \$01 704(I) PROJECT # 21384-03 2) 52 TL ☐ 2 DAYS ☐ 3 DAYS SAMPLE RECEIPT - TO BE FILLED BY LABORATORY Water MATRIX # 0d PROPERLY COOLED / Y/ N / NA SAMPLES INTACT (Y N / NA SAMPLES ACCEPTED MIN SAME DAY 0880 0935 0200 TIME 2060 0260 09 25 0430 2040 2160 0160 301 Menter R. Suite A., Santa Barka **TURN AROUND TIME** Site 14, Lemoure MAS 8/19/108 DATE RUSH Tetra Tech STREAMS LAB ID *TOTAL NUMBER OF CONTAINERS* RECEIVED IN GOOD COND. (V) N CUSTODY SEALS/Y/N/NA ST5-10PB 20.
IPROJECT NAME
EPA NT5-2 PDS NTS-#PS NT6-2 PDS NT5-6 PDS NT5-878 NTS-4PDS NT6-8PDS NT6-6PDS TB-1 PDS COMPANY ADDRESS NORMAL SAMPLE ID SITE NAME AND ADDRESS COMPANY ×



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 2

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			Method Blank	48929.01	48929.02	48929.03	48929.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	0.750J	0.870J
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 3

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			Method Blank	48929.01	48929.02	48929.03	48929.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	0.680J	1.21	1.48
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	1.07	5.10	20.1	29.3
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 4

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A1

Our Lab I.D.			Method Blank	48929.01	48929.02	48929.03	48929.04
Client Sample I.D.				ST1-2PDS	ST1-4PDS	ST1-7PDS	ST1-10PDS
Date Sampled				08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	48929.01	48929.02	48929.03	48929.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		107	107	109	108	108
Dibromofluoromethane	75-125		107	107	105	105	107
Toluene-d8	75-125		94.1	94.9	95.2	95.5	94.7



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 5

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.05	48929.06	48929.07	48929.08	48929.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			08/26/2008	08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	1.28	1.42	0.730J	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 6

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.05	48929.06	48929.07	48929.08	48929.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			08/26/2008	08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	2.43	4.19	5.37	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 7

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A1

Our Lab I.D.			48929.05	48929.06	48929.07	48929.08	48929.09
Client Sample I.D.			ST2-2PDS	ST2-4PDS	ST2-7PDS	ST2-10PDS	ST3-2PDS
Date Sampled			08/26/2008	08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			48929.05	48929.06	48929.07	48929.08	48929.09
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		109	110	105	104	100
Dibromofluoromethane	75-125		106	109	103	95.6	102
Toluene-d8	75-125		95.1	94.7	96.9	96.6	96.9



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 8

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.10	48929.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			08/26/2008	08/26/2008		
Date Prepared			09/04/2008	09/04/2008		
Preparation Method			5030B	5030B		
Date Analyzed			09/04/2008	09/04/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Acetone	10	10	ND	ND		
Benzene	0.5	1.0	ND	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND		
Bromochloromethane	0.5	1.0	ND	ND		
Bromodichloromethane	0.5	1.0	ND	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND		
2-Butanone (MEK)	5.0	5.0	ND	ND		
n-Butylbenzene	0.5	1.0	ND	ND		
sec-Butylbenzene	0.5	1.0	ND	ND		
tert-Butylbenzene	0.5	1.0	ND	ND		
Carbon Disulfide	0.5	1.0	ND	ND		
Carbon tetrachloride	0.5	1.0	ND	ND		
Chlorobenzene	0.5	1.0	ND	ND		
Chloroethane	1.5	3.0	ND	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND		
2-Chlorotoluene	0.5	1.0	ND	ND		
4-Chlorotoluene	0.5	1.0	ND	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND		
Dibromochloromethane	0.5	1.0	ND	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND		
Dibromomethane	0.5	1.0	ND	ND		
1,2-Dichlorobenzene	0.5	1.0	ND	ND		
1,3-Dichlorobenzene	0.5	1.0	ND	ND		
1,4-Dichlorobenzene	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 9

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.10	48929.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			08/26/2008	08/26/2008		
Date Prepared			09/04/2008	09/04/2008		
Preparation Method			5030B	5030B		
Date Analyzed			09/04/2008	09/04/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Dichlorodifluoromethane	1.5	3.0	ND	ND		
1,1-Dichloroethane	0.5	1.0	ND	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND		
1,1-Dichloroethene	0.5	1.0	ND	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND	ND		
1,2-Dichloropropane	0.5	1.0	ND	ND		
1,3-Dichloropropane	0.5	1.0	ND	ND		
2,2-Dichloropropane	0.5	1.0	ND	ND		
1,1-Dichloropropene	0.5	1.0	ND	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND	ND		
Ethylbenzene	0.5	1.0	ND	ND		
Hexachlorobutadiene	1.5	3.0	ND	ND		
2-Hexanone	2.5	5.0	ND	ND		
Isopropylbenzene	0.5	1.0	ND	ND		
p-Isopropyltoluene	0.5	1.0	ND	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND		
Methylene chloride (DCM)	2.0	4.0	ND	ND		
Naphthalene	0.5	1.0	ND	ND		
n-Propylbenzene	0.5	1.0	ND	ND		
Styrene	0.5	1.0	ND	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND		
Tetrachloroethene	0.5	1.0	ND	ND		
Toluene (Methyl benzene)	0.5	1.0	ND	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND		
1,1,1-Trichloroethane	0.5	1.0	ND	ND		
1,1,2-Trichloroethane	0.5	1.0	ND	ND		
Trichloroethene	0.5	1.0	ND	ND		
Trichlorofluoromethane	0.5	1.0	ND	ND		
1,2,3-Trichloropropane	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 10

Project ID: 21384-03

AETL Job Number Submitted Client Project Name: EPA Streams TO-65 48929 08/27/2008 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A1

Our Lab I.D.			48929.10	48929.11		
Client Sample I.D.			ST3-4PDS	ST3-7PDS		
Date Sampled			08/26/2008	08/26/2008		
Date Prepared			09/04/2008	09/04/2008		
Preparation Method			5030B	5030B		
Date Analyzed			09/04/2008	09/04/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND		
Vinyl Acetate	0.5	5.0	ND	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND		
o-Xylene	0.5	1.0	ND	ND		
m,p-Xylenes	1.0	2.0	ND	ND		
Our Lab I.D.			48929.10	48929.11		
Surrogates	%Rec.Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		99.9	99.4		
Dibromofluoromethane	75-125		100	103		
Toluene-d8	75-125		94.1	95.4		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 11

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			Method Blank	48929.12	48929.13	48929.14	48929.15
Client Sample I.D.				ST3-10PDS	ST5-2PDS	ST5-4PDS	ST5-7PDS
Date Sampled				08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **12**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			Method Blank	48929.12	48929.13	48929.14	48929.15
Client Sample I.D.				ST3-10PDS	ST5-2PDS	ST5-4PDS	ST5-7PDS
Date Sampled				08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	0.660J	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 13

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A2

Our Lab I.D.			Method Blank	48929.12	48929.13	48929.14	48929.15
Client Sample I.D.				ST3-10PDS	ST5-2PDS	ST5-4PDS	ST5-7PDS
Date Sampled				08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	48929.12	48929.13	48929.14	48929.15
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Bromofluorobenzene	75-125		104	103	102	102	100
Dibromofluoromethane	75-125		105	103	103	106	105
Toluene-d8	75-125		95.7	97.1	95.5	95.3	96.0



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 14

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.16	48929.17	48929.18	48929.19	48929.20
Client Sample I.D.			ST5-10PDS	NT5-2PDS	NT5-4PDS	NT5-6PDS	NT5-8PDS
Date Sampled			08/26/2008	08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acetone	10	10	ND	ND	ND	ND	ND
Benzene	0.5	1.0	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	ND
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	ND
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	ND
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	ND
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
Chloroethane	1.5	3.0	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	0.600J
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	ND
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	ND
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	ND
Dibromomethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 15

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.16	48929.17	48929.18	48929.19	48929.20
Client Sample I.D.			ST5-10PDS	NT5-2PDS	NT5-4PDS	NT5-6PDS	NT5-8PDS
Date Sampled			08/26/2008	08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Dichlorodifluoromethane	1.5	3.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.5	1.0	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.5	1.0	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.5	1.0	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.5	3.0	ND	ND	ND	ND	ND
2-Hexanone	2.5	5.0	ND	ND	ND	ND	ND
Isopropylbenzene	0.5	1.0	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.5	1.0	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND	ND	ND	ND
Methylene chloride (DCM)	2.0	4.0	ND	ND	ND	ND	ND
Naphthalene	0.5	1.0	ND	ND	ND	ND	ND
n-Propylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Styrene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	0.5	1.0	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.5	1.0	ND	ND	ND	ND	ND
Trichloroethene	0.5	1.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.5	1.0	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.5	1.0	ND	ND	ND	ND	ND



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **16**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A2

Our Lab I.D.			48929.16	48929.17	48929.18	48929.19	48929.20
Client Sample I.D.			ST5-10PDS	NT5-2PDS	NT5-4PDS	NT5-6PDS	NT5-8PDS
Date Sampled			08/26/2008	08/26/2008	08/26/2008	08/26/2008	08/26/2008
Date Prepared			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Preparation Method			5030B	5030B	5030B	5030B	5030B
Date Analyzed			09/04/2008	09/04/2008	09/04/2008	09/04/2008	09/04/2008
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			ug/L	ug/L	ug/L	ug/L	ug/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	ND
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	ND
o-Xylene	0.5	1.0	ND	ND	ND	ND	ND
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	ND
Our Lab I.D.			48929.16	48929.17	48929.18	48929.19	48929.20
Surrogates	%Rec.Limit		% Rec.				
Bromofluorobenzene	75-125		103	104	104	103	103
Dibromofluoromethane	75-125		106	102	102	104	106
Toluene-d8	75-125		95.9	96.1	96.7	96.5	96.6



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 17

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Client Sample I.D. Date Sampled Date Prepared Preparation Method Date Analyzed Matrix Units Dilution Factor Analytes	IDL		09/04/2008 5030B 09/04/2008 Aqueous ug/L	NT6-4PDS 08/26/2008 09/04/2008 5030B 09/04/2008 Aqueous ug/L		
Date Prepared Preparation Method Date Analyzed Matrix Units Dilution Factor	IDL		09/04/2008 5030B 09/04/2008 Aqueous ug/L	09/04/2008 5030B 09/04/2008 Aqueous		
Preparation Method Date Analyzed Matrix Units Dilution Factor	IDL		5030B 09/04/2008 Aqueous ug/L	5030B 09/04/2008 Aqueous		
Date Analyzed Matrix Units Dilution Factor	IDL		09/04/2008 Aqueous ug/L	09/04/2008 Aqueous		
Matrix Units Dilution Factor	IDL		Aqueous ug/L	Aqueous		
Units Dilution Factor	IDL		ug/L	-		
Dilution Factor	IDL			11σ/Ι		
	IDL			ug/L		
Analytes	IDL		1	1		
_		PQL	Results	Results		
Acetone 10)	10	ND	ND		
Benzene	0.5	1.0	ND	ND		
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND		
Bromochloromethane	0.5	1.0	ND	ND		
Bromodichloromethane	0.5	1.0	ND	ND		
Bromoform (Tribromomethane)	2.5	5.0	ND	ND		
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND		
2-Butanone (MEK)	5.0	5.0	ND	ND		
n-Butylbenzene C	0.5	1.0	ND	ND		
sec-Butylbenzene	0.5	1.0	ND	ND		
tert-Butylbenzene	0.5	1.0	ND	ND		
Carbon Disulfide	0.5	1.0	ND	ND		
Carbon tetrachloride C	0.5	1.0	ND	ND		
Chlorobenzene	0.5	1.0	ND	ND		
Chloroethane 1	1.5	3.0	ND	ND		
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND		
Chloroform (Trichloromethane)	0.5	1.0	ND	ND		
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND		
2-Chlorotoluene	0.5	1.0	ND	ND		
4-Chlorotoluene	0.5	1.0	ND	ND		
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND		
Dibromochloromethane	0.5	1.0	ND	ND		
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND		
Dibromomethane	0.5	1.0	ND	ND		
1,2-Dichlorobenzene	0.5	1.0	ND	ND		
1,3-Dichlorobenzene	0.5	1.0	ND	ND		
1,4-Dichlorobenzene	0.5	1.0	ND	ND		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 18

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			48929.21	48929.22		
Client Sample I.D.			NT6-2PDS	NT6-4PDS		
Date Sampled			08/26/2008	08/26/2008		
Date Prepared			09/04/2008	09/04/2008		
Preparation Method			5030B	5030B		
Date Analyzed			09/04/2008	09/04/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Dichlorodifluoromethane	1.5	3.0	ND	ND		
1,1-Dichloroethane	0.5	1.0	ND	ND		
1,2-Dichloroethane (EDC)	0.5	1.0	ND	ND		
1,1-Dichloroethene	0.5	1.0	ND	ND		
cis-1,2-Dichloroethene	0.5	1.0	ND	ND		
trans-1,2-Dichloroethene	0.5	1.0	ND	ND		
1,2-Dichloropropane	0.5	1.0	ND	ND		
1,3-Dichloropropane	0.5	1.0	ND	ND		
2,2-Dichloropropane	0.5	1.0	ND	ND		
1,1-Dichloropropene	0.5	1.0	ND	ND		
cis-1,3-Dichloropropene	0.5	1.0	ND	ND		
trans-1,3-Dichloropropene	0.5	1.0	ND	ND		
Ethylbenzene	0.5	1.0	ND	ND		
Hexachlorobutadiene	1.5	3.0	ND	ND		
2-Hexanone	2.5	5.0	ND	ND		
Isopropylbenzene	0.5	1.0	ND	ND		
p-Isopropyltoluene	0.5	1.0	ND	ND		
4-Methyl-2-pentanone (MIBK)	2.5	5.0	ND	ND		
Methyl-tert-butyl ether (MTBE)	0.5	1.0	ND	ND		
Methylene chloride (DCM)	2.0	4.0	ND	ND		
Naphthalene	0.5	1.0	ND	ND		
n-Propylbenzene	0.5	1.0	ND	ND		
Styrene	0.5	1.0	ND	ND		
1,1,1,2-Tetrachloroethane	0.5	1.0	ND	ND		
1,1,2,2-Tetrachloroethane	0.5	1.0	ND	ND		
Tetrachloroethene	0.5	1.0	ND	ND		
Toluene (Methyl benzene)	0.5	1.0	ND	ND		
1,2,3-Trichlorobenzene	0.5	1.0	ND	ND		
1,2,4-Trichlorobenzene	0.5	1.0	ND	ND		
1,1,1-Trichloroethane	0.5	1.0	ND	ND		
1,1,2-Trichloroethane	0.5	1.0	ND	ND		
Trichloroethene	0.5	1.0	ND	ND		
Trichlorofluoromethane	0.5	1.0	ND	ND		
1,2,3-Trichloropropane	0.5	1.0	ND	ND	_	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: 19

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A2

Our Lab I.D.			48929.21	48929.22		
Client Sample I.D.			NT6-2PDS	NT6-4PDS		
Date Sampled			08/26/2008	08/26/2008		
Date Prepared			09/04/2008	09/04/2008		
Preparation Method			5030B	5030B		
Date Analyzed			09/04/2008	09/04/2008		
Matrix			Aqueous	Aqueous		
Units			ug/L	ug/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND		
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND		
Vinyl Acetate	0.5	5.0	ND	ND		
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND		
o-Xylene	0.5	1.0	ND	ND		
m,p-Xylenes	1.0	2.0	ND	ND		
Our Lab I.D.			48929.21	48929.22		
Surrogates	%Rec.Limit		% Rec.	% Rec.		
Bromofluorobenzene	75-125		104	103		
Dibromofluoromethane	75-125		105	105		
Toluene-d8	75-125		94.9	96.2		



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Tetra Tech Inc.
301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 20

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Our Lab I.D.			Method Blank	48929.23	48929.24	48929.25	
Client Sample I.D.				NT6-6PDS	NT6-8PDS	TB-1PDS	
Date Sampled Date Prepared				08/26/2008	08/26/2008	08/26/2008	
			09/05/2008	09/05/2008	09/05/2008	09/05/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			09/05/2008	09/05/2008	09/05/2008	09/05/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
Acetone	10	10	ND	ND	ND	ND	
Benzene	0.5	1.0	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	0.5	1.0	ND	ND	ND	ND	
Bromochloromethane	0.5	1.0	ND	ND	ND	ND	
Bromodichloromethane	0.5	1.0	ND	ND	ND	ND	
Bromoform (Tribromomethane)	2.5	5.0	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	1.5	3.0	ND	ND	ND	ND	
2-Butanone (MEK)	5.0	5.0	ND	ND	ND	ND	
n-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
sec-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
tert-Butylbenzene	0.5	1.0	ND	ND	ND	ND	
Carbon Disulfide	0.5	1.0	ND	ND	ND	ND	
Carbon tetrachloride	0.5	1.0	ND	ND	ND	ND	
Chlorobenzene	0.5	1.0	ND	ND	ND	ND	
Chloroethane	1.5	3.0	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	2.5	5.0	ND	ND	ND	ND	
Chloroform (Trichloromethane)	0.5	1.0	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	1.5	3.0	ND	ND	ND	ND	
2-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
4-Chlorotoluene	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	5.0	ND	ND	ND	ND	
Dibromochloromethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.5	1.0	ND	ND	ND	ND	
Dibromomethane	0.5	1.0	ND	ND	ND	ND	
1,2-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,3-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
1,4-Dichlorobenzene	0.5	1.0	ND	ND	ND	ND	
		1	1		1	1	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **21**

Project ID: 21384-03

Project Name: EPA Streams TO-65

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0905081A1 Our Lab I.D. Method Blank 48929.23 48929.24 48929.25 Client Sample I.D. NT6-6PDS NT6-8PDS TB-1PDS 08/26/2008 Date Sampled 08/26/2008 08/26/2008 09/05/2008 09/05/2008 09/05/2008 Date Prepared 09/05/2008 5030B 5030B 5030B 5030B Preparation Method 09/05/2008 09/05/2008 09/05/2008 Date Analyzed 09/05/2008 Matrix Aqueous Aqueous Aqueous Aqueous Units ug/L ug/L ug/L ug/L Dilution Factor Analytes PQL Results Results Results Results MDL 3.0 Dichlorodifluoromethane 1.5 ND ND ND ND 0.5 1.0 1,1-Dichloroethane ND ND ND 1,2-Dichloroethane (EDC) 0.5 1.0 ND ND ND ND 1.0 1,1-Dichloroethene 0.5 ND ND ND ND 1.0 ND 0.5 ND ND ND cis-1,2-Dichloroethene trans-1,2-Dichloroethene 0.5 1.0 ND ND ND ND 0.5 1.0 ND ND ND ND 1,2-Dichloropropane 1,3-Dichloropropane 0.5 1.0 ND ND ND ND 2,2-Dichloropropane 0.5 1.0 ND ND ND ND 1.0 ND 0.5 ND ND ND 1,1-Dichloropropene 0.5 1.0 ND ND ND ND cis-1,3-Dichloropropene trans-1,3-Dichloropropene 0.5 1.0 ND ND ND ND 0.5 1.0 ND ND Ethylbenzene ND Hexachlorobutadiene 1.5 3.0 ND ND ND ND 2-Hexanone 2.5 5.0 ND ND ND ND Isopropylbenzene 0.5 1.0 ND ND ND ND 1.0 0.5 ND ND ND ND p-Isopropyltoluene 2.5 5.0 4-Methyl-2-pentanone (MIBK) ND ND ND ND Methyl-tert-butyl ether (MTBE) 0.5 1.0 ND ND ND ND 4.0 ND Methylene chloride (DCM) 2.0 ND ND ND 0.5 1.0 ND ND ND Naphthalene ND 0.5 1.0 ND ND ND ND n-Propylbenzene 0.5 1.0 ND ND ND ND Styrene 0.5 1.0 ND 1,1,1,2-Tetrachloroethane ND ND ND 1,1,2,2-Tetrachloroethane 0.5 1.0 ND ND ND ND Tetrachloroethene 0.5 1.0 ND ND ND ND 0.5 1.0 Toluene (Methyl benzene) ND ND ND ND 1,2,3-Trichlorobenzene 0.5 1.0 ND ND ND ND 1,2,4-Trichlorobenzene 0.5 1.0 ND ND ND ND 0.5 1.0 ND ND ND ND 1,1,1-Trichloroethane 1,1,2-Trichloroethane 0.5 1.0 ND ND ND ND 0.5 1.0 ND ND ND ND Trichloroethene 0.5 1.0 ND ND ND ND Trichlorofluoromethane 0.5 1.0 ND ND ND 1,2,3-Trichloropropane



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Page: **22**

Project ID: 21384-03

Project Name: EPA Streams TO-65

 AETL Job Number
 Submitted
 Client

 48929
 08/27/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0905081A1

Our Lab I.D.			Method Blank	48929.23	48929.24	48929.25	
Client Sample I.D.				NT6-6PDS	NT6-8PDS	TB-1PDS	
Date Sampled				08/26/2008	08/26/2008	08/26/2008	
Date Prepared			09/05/2008	09/05/2008	09/05/2008	09/05/2008	
Preparation Method			5030B	5030B	5030B	5030B	
Date Analyzed			09/05/2008	09/05/2008	09/05/2008	09/05/2008	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results	
1,2,4-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	0.5	1.0	ND	ND	ND	ND	
Vinyl Acetate	0.5	5.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	0.5	3.0	ND	ND	ND	ND	
o-Xylene	0.5	1.0	ND	ND	ND	ND	
m,p-Xylenes	1.0	2.0	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	48929.23	48929.24	48929.25	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
Bromofluorobenzene	75-125		101	102	100	98.3	
Dibromofluoromethane	75-125		105	101	103	102	
Toluene-d8	75-125		94.8	96.8	95.4	94.8	



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 23

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A1; Dup or Spiked Sample: B0904081A1; LCS: Clean Water; QC Prepared: 09/04/2008; QC Analyzed: 09/04/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	58.50	117	50.00	58.00	116	<1	75-125	<20
Chlorobenzene	0.0	50.00	55.00	110	50.00	54.50	109	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	55.00	110	50.00	55.00	110	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	52.50	105	50.00	51.50	103	1.92	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	53.50	107	50.00	53.50	107	<1	75-125	<20
Trichloroethene	0.0	50.00	56.50	113	50.00	57.50	115	1.75	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	42.45	84.9	50.00	42.15	84.3	<1	75-125	<20
Dibromofluoromethane	0.0	50.00	49.85	99.7	50.00	48.75	97.5	2.21	75-125	<20
Toluene-d8	0.0	50.00	46.95	93.9	50.00	46.85	93.7	<1	75-125	<20

QC Batch No: 0904081A1; Dup or Spiked Sample: B0904081A1; LCS: Clean Water; QC Prepared: 09/04/2008; QC Analyzed: 09/04/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	60.00	120	75-125			
Chlorobenzene	50.00	55.00	110	75-125			
1,1-Dichloroethene	50.00	56.00	112	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	52.00	104	75-125			
Toluene (Methyl benzene)	50.00	54.00	108	75-125			
Trichloroethene	50.00	59.00	118	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	55.10	110	75-125			
Ethylbenzene	50.00	52.30	105	75-125			
1,1,1-Trichloroethane	50.00	47.80	95.6	75-125			
o-Xylene	50.00	55.00	110	75-125			
m,p-Xylenes	100.00	110.00	110	75-125			
Surrogates							
Bromofluorobenzene	50.00	42.30	84.6	75-125			
Dibromofluoromethane	50.00	49.45	98.9	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: **24**

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 48929
 08/27/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A1; Dup or Spiked Sample: B0904081A1; LCS: Clean Water; QC Prepared: 09/04/2008; QC Analyzed: 09/04/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	46.85	93.7	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: 25

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A2; Dup or Spiked Sample: B0904081A2; LCS: Clean Water; QC Prepared: 09/04/2008; QC Analyzed: 09/04/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	54.50	109	50.00	59.00	118	7.9	75-125	<20
Chlorobenzene	0.0	50.00	52.00	104	50.00	52.50	105	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	54.00	108	50.00	54.50	109	<1	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	54.00	108	50.00	56.00	112	3.6	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	53.00	106	50.00	54.00	108	1.9	75-125	<20
Trichloroethene	0.0	50.00	59.00	118	50.00	57.00	114	3.4	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	45.80	91.6	50.00	46.15	92.3	<1	75-125	<20
Dibromofluoromethane	0.0	50.00	52.00	104	50.00	53.00	106	1.9	75-125	<20
Toluene-d8	0.0	50.00	46.70	93.4	50.00	46.95	93.9	<1	75-125	<20

QC Batch No: 0904081A2; Dup or Spiked Sample: B0904081A2; LCS: Clean Water; QC Prepared: 09/04/2008; QC Analyzed: 09/04/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	60.50	121	75-125			
Chlorobenzene	50.00	52.50	105	75-125			
1,1-Dichloroethene	50.00	51.00	102	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	54.00	108	75-125			
Toluene (Methyl benzene)	50.00	53.50	107	75-125			
Trichloroethene	50.00	57.00	114	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	50.50	101	75-125			
Ethylbenzene	50.00	51.50	103	75-125			
1,1,1-Trichloroethane	50.00	51.50	103	75-125			
o-Xylene	50.00	54.50	109	75-125			
m,p-Xylenes	100.00	108.00	108	75-125			
Surrogates							
Bromofluorobenzene	50.00	45.55	91.1	75-125			
Dibromofluoromethane	50.00	53.00	106	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: **26**

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 48929
 08/27/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0904081A2; Dup or Spiked Sample: B0904081A2; LCS: Clean Water; QC Prepared: 09/04/2008; QC Analyzed: 09/04/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	46.80	93.6	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Tetra Tech Inc. 301 Mentor Drive

Suite "A"

Santa Barbara, CA 93111-

Telephone: (805)681-3100 Attn: James Elliot Page: **27**

Project ID: 21384-03

Project Name: EPA Streams TO-65

Site 14 Lemoore NAS

Site

AETL Job Number	Submitted	Client
48929	08/27/2008	T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0905081A1; Dup or Spiked Sample: B0905081A1; LCS: Clean Water; QC Prepared: 09/05/2008; QC Analyzed: 09/05/2008; Units: ppb

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Benzene	0.0	50.00	59.50	119	50.00	58.50	117	1.7	75-125	<20
Chlorobenzene	0.0	50.00	52.00	104	50.00	52.00	104	<1	75-125	<20
1,1-Dichloroethene	0.0	50.00	58.00	116	50.00	60.00	120	3.4	75-125	<20
Methyl-tert-butyl ether (MTBE)	0.0	50.00	53.00	106	50.00	52.50	105	<1	75-125	<20
Toluene (Methyl benzene)	0.0	50.00	52.50	105	50.00	52.00	104	<1	75-125	<20
Trichloroethene	0.0	50.00	57.50	115	50.00	59.50	119	3.4	75-125	<20
Surrogates										
Bromofluorobenzene	0.0	50.00	43.45	86.9	50.00	43.90	87.8	1.0	75-125	<20
Dibromofluoromethane	0.0	50.00	50.50	101	50.00	50.50	101	<1	75-125	<20
Toluene-d8	0.0	50.00	46.85	93.7	50.00	46.55	93.1	<1	75-125	<20

QC Batch No: 0905081A1; Dup or Spiked Sample: B0905081A1; LCS: Clean Water; QC Prepared: 09/05/2008; QC Analyzed: 09/05/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Benzene	50.00	56.00	112	75-125			
Chlorobenzene	50.00	49.40	98.8	75-125			
1,1-Dichloroethene	50.00	62.00	124	75-125			
Methyl-tert-butyl ether (MTBE)	50.00	49.30	98.6	75-125			
Toluene (Methyl benzene)	50.00	49.50	99.0	75-125			
Trichloroethene	50.00	54.50	109	75-125			
LCS							
Chloroform (Trichloromethane)	50.00	53.00	106	75-125			
Ethylbenzene	50.00	48.00	96.0	75-125			
1,1,1-Trichloroethane	50.00	44.90	89.8	75-125			
o-Xylene	50.00	50.50	101	75-125			
m,p-Xylenes	100.00	101.00	101	75-125			
Surrogates							
Bromofluorobenzene	50.00	44.00	88.0	75-125			
Dibromofluoromethane	50.00	52.00	104	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: 28

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 48929
 08/27/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0905081A1; Dup or Spiked Sample: B0905081A1; LCS: Clean Water; QC Prepared: 09/05/2008; QC Analyzed: 09/05/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	46.90	93.8	75-125			



2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Page: **36**

 Project ID:
 21384-03
 AETL Job Number
 Submitted
 Client

 Project Name:
 EPA Streams TO-65
 48398
 07/24/2008
 T/TSB

Method: 8260B, Volatile Organic Compounds by GC/MS (SW846)

QC Batch No: 0729081A1; Dup or Spiked Sample: B0729081A1; LCS: Clean Water; QC Prepared: 07/29/2008; QC Analyzed: 07/29/2008; Units: ppb

	LCS	LCS	LCS	LCS/LCSD			
Analytes	Concen	Recov	% REC	% Limit			
Toluene-d8	50.00	52.00	104	75-125			



March 17, 2008

Mr. James Elliot Tetra Tech 4213 State Street, Suite 100 Santa Barbara, CA 93110

SUBJECT: DATA REPORT – SITE 14 - NAS LEMOORE - FRESNO, CA – TETRA TECH PROJECT #21384-02

H&P Project # TT022508-T2

Mr. Elliot:

Please find enclosed a data report for the above referenced location. Vapor samples were analyzed on-site in H&P's mobile laboratory.

Project Summary

The following analyses were conducted:

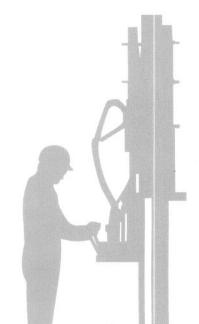
206 vapors for TCE and PCE by EPA Method 8021, GC-ECD

The samples were received on-site in appropriate containers with appropriate labels, seals, and chain-of-custody documentation.

H&P Mobile GeoChemistry appreciates the opportunity to provide analytical services to Tetra Tech on this project. If you have any questions relating to this data or report, please do not hesitate to contact us.

Sincerely,

Or. Blayne Hartman

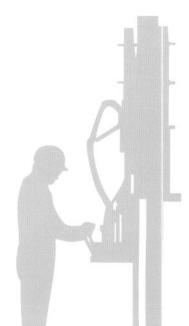




H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

SAMPLE ID	DATE ANALYZED	TCE (ug/m3)	PCE (ug/m3)
		, ,	,
ST1-10 1PV	2/25/2008	29,000 E	590
ST1-10 2PV	2/25/2008	19,000	<1,000
ST1-10 5PV	2/25/2008	24,000	<1,000
NT4-10 1PV	2/25/2008	nd	nd
NT4-10 2PV	2/25/2008	nd	nd
NT4-10 5PV	2/25/2008	nd	nd
ST3-10 2PV	2/25/2008	1,400	nd
ST3-10 3PV	2/25/2008	2,200	nd
ST3-10 5PV	2/25/2008	420	nd
DETECTION LIMITS		50	50
E INDICATES ESTIMATE			
ND INDICATES NOT DETECTED AT	LISTED DETECTION LIMITS		





H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

	DATE	TCE	PCE
SAMPLE ID	ANALYZED	(ug/m3)	(ug/m3)
	0/00/0000	750	nd
ST1-SS	2/26/2008		110
ST1-2	2/26/2008	6,500	
ST1-4	2/26/2008	23,000	300
ST1MP-4	2/26/2008	43,000 E	1,200
ST4-10 2PV	2/26/2008	nd	nd
ST4-10 3PV	2/26/2008	nd	nd
ST4-10 5PV	2/26/2008	nd	nd
ST2-10 2PV	2/26/2008	1,700	<500
ST2-10 3PV	2/26/2008	1,600	<500
ST2-10 5PV	2/26/2008	1,600	<500
ST3-SS	2/26/2008	460	69
ST3-NF	2/26/2008	390	nd
ST3-PK	2/26/2008	460	nd
ST3-TF	2/26/2008	380	nd
ST3-CU	2/26/2008	nd	nd
ST3-PL	2/26/2008	310	nd
NT1-SS	2/26/2008	540	nd
NT1-2	2/26/2008	1,700	nd
NT1-4	2/26/2008	3,000	nd
NT1-7	2/26/2008	5,100	nd
NT1-7 NT1-10	2/26/2008	6,100	74
NT2-SS	2/26/2008	nd	nd
NT2-33 NT2-2	2/26/2008	nd	nd
	2/26/2008	nd	nd
NT2-2 DUP	2/26/2008	150	nd
NT2-4	2/26/2008	440	nd
NT2-7	2/26/2008	720	nd
NT2-10		nd	nd
NT3-2	2/26/2008		nd
NT3-4	2/26/2008	nd 220	
NT3-7	2/26/2008		nd -
NT3-10	2/26/2008	380	nd
NT4-2	2/26/2008	nd	nd
NT4-4	2/26/2008	nd	nd
NT4-7	2/26/2008	nd	nd
NT4-7 DUP	2/26/2008	nd	nd
DETECTION LIMITS		50	50

E INDICATES ESTIMATE

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS



H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

SAMPLE ID	DATE ANALYZED	TCE (ug/m3)	PCE (ug/m3)
SAMPLE ID	ANALIZED	(ug/iii3)	(ug/iiio)
NT4-10	2/26/2008	nd	nd
NT5-2	2/26/2008	nd	nd
NT5-4	2/26/2008	nd	nd
NT5-7	2/26/2008	nd	nd
NT5-10	2/26/2008	nd	nd
NT6-2	2/26/2008	nd	nd
NT6-4	2/26/2008	nd	nd
NT6-4 DUP	2/26/2008	nd	nd
NT6-7	2/26/2008	nd	nd
NT6-10	2/26/2008	nd	nd
ST6-SS	2/26/2008	nd	nd
ST6-NF	2/26/2008	nd	nd
ST6-PK	2/26/2008	nd	nd
ST6-TF	2/26/2008	nd	nd
ST6-CU	2/26/2008	nd	nd
ST6-PL	2/26/2008	nd	nd
DETECTION LIMITS		50	50
ND INDICATES NOT DETECTED	AT LISTED DETECTION LIMITS		





H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

SAMPLE ID	DATE ANALYZED	TCE (ug/m3)	PCE (ug/m3)
SAMELL ID	ANALIZED	(ug/iiio)	(ug/illo)
ST1-SS	2/27/2008	540	nd
ST1-2	2/27/2008	5,900	87
ST1-4	2/27/2008	14,000	<250
ST1-7	2/27/2008	21,000	320
ST1-10	2/27/2008	23,000	360
ST1MP-2	2/27/2008	3,500	<250
ST1MP-4	2/27/2008	19,000	340
ST1MP-7	2/27/2008	6,500	<250
ST1MP-10	2/27/2008	1,500	<250
ST2-SS	2/27/2008	140	nd
ST2-2	2/27/2008	210	nd
ST2-4	2/27/2008	590	nd
ST2-7	2/27/2008	2,000	74
ST2-7 DUP	2/27/2008	1,700	nd
ST2-10	2/27/2008	2,200	120
ST2MP-2	2/27/2008	790	nd
ST2MP-4	2/27/2008	1,800	71
ST2MP-7	2/27/2008	2,800	160
ST2MP-7 DUP	2/27/2008	3,000	190
ST3-2	2/27/2008	nd	nd
ST3-4	2/27/2008	83	nd
ST3-7	2/27/2008	430	nd
ST3-10	2/27/2008	1,500	nd
ST3MP-2	2/27/2008	110	nd
ST3MP-4	2/27/2008	nd	51
ST3MP-7	2/27/2008	650	90
ST3MP-10	2/27/2008	2,000	nd
ST4-2	2/27/2008	nd	nd
ST4-4	2/27/2008	nd	nd m
ST4-4 DUP	2/27/2008	nd	nd -
ST4-7	2/27/2008	nd	nd
ST4-10	2/27/2008	nd	nd
ST4MP-2	2/27/2008	nd	nd _
ST4MP-4	2/27/2008	nd	nd
ST4MP-4 DUP	2/27/2008	nd	nd
01-1WII -4 DOI	2/2//2000	IId	III
DETECTION LIMITS		50	50
ND INDICATES NOT DETECTED	AT LISTED DETECTION LIMITS		

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS



H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

	DATE	TCE	PCE
SAMPLE ID	ANALYZED	(ug/m3)	(ug/m3)
ST4MP-7	2/27/2008	nd	72
ST5-2	2/27/2008	nd	nd
ST5-4	2/27/2008	nd	nd
ST5-7	2/27/2008	nd	nd
ST5-10	2/27/2008	nd	nd
ST5MP-2	2/27/2008	nd	51
ST5MP-4	2/27/2008	* C	nd
ST5MP-7	2/27/2008	nd	nd
ST6-2	2/27/2008	nd	nd
ST6-4	2/27/2008	nd	nd
ST6-7	2/27/2008	nd	nd
ST6-10	2/27/2008	nd	nd
ST6-10 DUP	2/27/2008	nd	nd
ST6MP-2	2/27/2008	nd	65
ST6MP-4	2/27/2008	* C	nd
ST6MP-7	2/27/2008	nd	52
ST6MP-10	2/27/2008	* C	nd
ST6MP-10 DUP	2/27/2008	* C	nd
DETECTION LIMITS		50	50

* INDICATES NO ESTIMATE POSSIBLE

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS





H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

	DATE	TCE	PCE
SAMPLE ID	ANALYZED	(ug/m3)	(ug/m3)
		100	
NT1-SS	2/28/2008	460	nd
NT1-2	2/28/2008	1,900	nd
NT1-4	2/28/2008	2,600	nd
NT1-7	2/28/2008	5,600	92
NT1-10	2/28/2008	6,300	85
NT2-SS	2/28/2008	nd	nd
NT2-2	2/28/2008	nd	nd
NT2-2 DUP	2/28/2008	nd	nd
NT2-4	2/28/2008	120	nd
NT2-7	2/28/2008	420	nd
NT2-10	2/28/2008	600	nd
NT3-2	2/28/2008	nd	nd
NT3-4	2/28/2008	nd	nd
NT3-7	2/28/2008	230	nd
NT3-10	2/28/2008	350	nd
NT4-2	2/28/2008	nd	nd
NT4-4	2/28/2008	nd	nd
NT4-7	2/28/2008	nd	nd
NT4-7 DUP	2/28/2008	nd	nd
NT4-10	2/28/2008	nd	nd
NT5-2	2/28/2008	nd	nd
NT5-4	2/28/2008	nd	nd
NT5-7	2/28/2008	nd	nd
NT5-10	2/28/2008	nd	nd
NT6-2	2/28/2008	nd	nd
NT6-4	2/28/2008	nd	nd
NT6-4 DUP	2/28/2008	nd	nd
NT6-7	2/28/2008	nd	nd
NT6-10	2/28/2008	nd	nd
ST1-SS	2/28/2008	720	nd -
ST1-2	2/28/2008	7,000	66
ST1-2 ST1-4	2/28/2008	10,000	<250
ST1-4 ST1-7	2/28/2008	18,000	250
ST1-7 ST1-10	2/28/2008	26,000	410
	2/28/2008	9,200 E	400
ST1MP-2	2/20/2000	3,200 L	700
DETECTION LIMITS		50	50

E INDICATES ESTIMATE

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS



H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

	DATE	TCE	PCE
SAMPLE ID	ANALYZED	(ug/m3)	(ug/m3)
ST1MP-4	2/28/2008	20,000	310
ST1MP-7	2/28/2008	6,300	<500
ST1MP-10	2/28/2008	120	nd
ST2MP-2	2/28/2008	500 C	nd
ST2MP-4	2/28/2008	2,100	92
ST2MP-7	2/28/2008	3,300	250
ST2MP-7 DUP	2/28/2008	2,900	240
ST2-SS	2/28/2008	130	nd
ST2-2	2/28/2008	170	nd
ST2-4	2/28/2008	510	nd
ST2-7	2/28/2008	2,000	76
ST2-7 ST2-7 DUP	2/28/2008	1,700	nd
ST2-10	2/28/2008	1,600	59
ST3MP-2	2/28/2008	210	nd
ST3MP-4	2/28/2008	nd	nd
ST3MP-7	2/28/2008	710	nd
ST3MP-10	2/28/2008	2,100 C	75
ST3-2	2/28/2008	2,100 C	nd
ST3-4	2/28/2008	62	nd
ST3-7	2/28/2008	450	nd
ST4MP-2	2/28/2008	nd	nd
ST4MP-4	2/28/2008	nd	nd
ST4MP-4 DUP	2/28/2008	75	nd
ST4MP-7	2/28/2008	nd	nd
ST4-2	2/28/2008	nd	nd
ST4-4	2/28/2008	nd	nd
ST4-4 DUP	2/28/2008	nd	nd
ST4-7	2/28/2008	nd	nd
ST4-10	2/28/2008	nd	nd i
		30500	_
DETECTION LIMITS		50	50

C INDICATES COEULTION

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS





H&P Project #TT022508-T2

TCE & PCE (EPA 8021 Method) ANALYSES OF SOIL VAPORS

	DATE	TCE	PCE
SAMPLE ID	ANALYZED	(ug/m3)	(ug/m3)
ST5MP-2	2/29/2008	nd	nd
ST5MP-4	2/29/2008	* C	nd
ST5MP-7	2/29/2008	* C	nd
ST5-2	2/29/2008	nd	nd
ST5-4	2/29/2008	nd	nd
ST5-7	2/29/2008	nd	nd
ST5-10	2/29/2008	nd	nd
ST6MP-2	2/29/2008	* C	nd
ST6MP-4	2/29/2008	* C	nd
ST6MP-7	2/29/2008	nd	nd
ST6MP-10	2/29/2008	* C	nd
ST6MP-10 DUP	2/29/2008	nd	nd
ST6-2	2/29/2008	nd	nd
ST6-4	2/29/2008	nd	nd
ST6-7	2/29/2008	nd	nd
ST6-10	2/29/2008	nd	nd
ST6-10 DUP	2/29/2008	nd	nd
ST3-PL	2/29/2008	310	nd
ST3-CU	2/29/2008	170	nd
ST3-TF	2/29/2008	410	nd
ST3-PK	2/29/2008	340	nd
ST3-NF	2/29/2008	390	nd
ST3-SS	2/29/2008	350	nd
ST6-PL	2/29/2008	nd	nd
ST6-CU	2/29/2008	nd	nd
ST6-TF	2/29/2008	nd	nd
ST6-PK	2/29/2008	nd	nd
ST6-PK ST6-NF	2/29/2008	nd	nd
ST6-SS	2/29/2008	nd	nd
DETECTION LIMITS	7	50	50

C INDICATES COEULTION

* INDICATES NO ESTIMATE POSSIBLE

ND INDICATES NOT DETECTED AT LISTED DETECTION LIMITS



MOBILE GEOCHEMISTRY 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Chain of Custody Record

Date: 2 -	15-08
H&P Project #	TT022508-T2
Outside Lab:	Holding Times. Holdin

Client: Tetr	a	Tech	a paices	nargas I	STUR RI	r analys				m							idian	ods	en art		Page:	· =/	of	1	_
Address:	nettn	old. Upon specific w	ort as b	signale for the	ples de	ing sam													tact:	Ja	me	25	Elli	ot	_
		endwise to fullplott in		S /	21 3	142	OIL COVIDA	Locat	ion: _	Sir	e	14	L	em	000				011 01	7 (151	0.1.	-	1.		_
Email:	00 0 0	Phon	e: _80	15-6	81-5	100	the state of the	Fax:	ly be	em er	olom	88 91	ogo	b ol	Huol				time:	o olo	OIA	-54	re	H	_
		onlent analysis is pa	o enursia	Intact: Seal Int	Yes Yes Yes eceived	No No No		ext	aw y	s. Dr	Juls	8 pht	260	B pw n	bei	ТО	-15	ses:	☐ TO-15	its:] O2 🔲 N2	CESS	hoge hoge lengt	pq pp ib	
Special Instructions:					or de	e liable t		H agasoline adiesel	418.1 TRPH	21 for BTEX/MTBE	BTEX / Oxygenates	TPH gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	C (specify)	Naphthalene 8260B	Methane	Fixed Gases CO2	O21 Tee, pe	dianic o	de d	Total # of containers
Sample Name	ong pro	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418	8021	BTE	TPI	00	DTS	Ket	Full	BTE	TCC	Nap	Met	Fixe	00	apted	10	Tota
ST1-10 1PL	1000	less different lerms	12	1520	2/25	SV	Syringe	9, 11	Clini is	MAJO 1	0 08	ETGLI II	A PILL		57114	134	0 10	offic	OS V		i linu	X		18	1
ST1-10 21	V		24	1520			/															×			1
ST1-10 5			60	1521																		×			1
	PV		12	1600																		×			1
	PV		24	1600)															X			1
NT4-10 5	PV		60	1601																		X			1
ST3-10 2	-		24	1643																		X			1
	PV		36	1643																		×			1
573-10 5	PV		60	1644		4	V															X			1
Relinquished by: (Signature) (company) Relinquished by: (Signature) (company)				Received Received	y: (Signature) by: (Signature)	/							1	(compa	0		Date: 2-15-98			_	Time: 700				
Relinquished by: (Signature)						Received I	Received by: (Signature)							(company)				Date: Tim			ie:		-		
*Signature constitutes authoriza	ation to p	proceed with analysis and accep	otance of co	ndition on b	ack.	Sample di	sposal instruction	on:		Dis	posal (D \$2.00	each	[F	Return t	o client			Pickup					

Chain of Custody Record

Date: 2-26-08

H&P Project # TT022508-T2 Outside Lab:

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Client: Tetra	Client: Tetra Tech							ctor:	Ma	nk	B	un	ke	orft Ì	ity o	Isibi	spor	भा भा		Page:	1	_ of	6
Address:	id". Upon specific writ d holding of samples.												2					ntact:	Ja	eme	5 1	Elliot	
Email:	of baldus ass 5. Phor						Locati		Sit	e	14,	L	emo	ore	_/	VAS	5	andal z	and a	04.	516	are en la	
EDF: Yes No	71101	10.		le Receip		ax		T	8260B					TO-15			a time	T		.58	teapq		
Global ID:	content analysis is pen	enutaio	Seal Ir	Yes 🗆	Yes No No No No Yes No Ceived on Site)			by ye	s Dr	ulsv	ght	sw t	ew n	bet	ege	918	998	TO-15	its:	N ₂	-	Report	
	naserves the right to tupon payment history incurred by H&P in it attation method of san		costs	ed or de for lega	nesseron eldra s	ny time be a ccounts an	gasoline diesel ext	dep nay nqu	BTEX/MTBE	Oxygenates	tys, a Cre and	b 98 bevo	WQCB	ens nee laen	ams as tr as tr intr	tibe in non inon	(y)	□ 8260B	to 1, nost	s CO2 O2	TCE, PCE	Payme advand days a outstar Sampl	
services are t by denetally ac-	region at the time the successfully analyzed mount for the services	Purge	oag arti	care in	Sample	Container	тРН 🗆 да	418.1 TRPH	8021 for BT	BTEX / Oxy	TPH gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	LCC (specify)	Naphthalene	Methane	Fixed Gases	8021	Limit render	Total # of co
Sample Name	Field Point Name	Voi 6	7ime	Date	Type SV	Туре	100	7	-	bo	Geni	NO ST	anno	ord	1 20		lis	2	-		12 91	rial in	
ST1-55		6.1	0934	1	30	Syringe	-							- 5	1214	0 19	biflo	у эп	i gni	THUY 4	×	OSVOS	1
ST1-2	no sample	12	0935																		7		/
STIMP-4		6.3	1005	-																	×		/
ST1-4		18	1005	-																			/
ST4-10 2PV		24	1106		-																×		
5T4-10 3pv		36	1107	(
5T4-10 5PV		60	1107																		X		1
5T2-10 2PV		24	1139																		×	-	1
5T2-10 3PV		36	1139		1	V															×		1
Relinquished by: (Signature)			(company)	- 4	Received	(Signature)	He	/	0						(cofibe	any)		Date:	1.0		Time		/
Relinquished by: (Signature)	Relinquished by: (Signature) (company)				Received	by: (Signature)	- villy								(compa	/		2-16-08 Date:			1730 Time:		
Relinquished by: (Signature)	elinquished by: (Signature) (company)					Received by: (Signature) (compan						any)		Date:			Time:						
*Signature constitutes authorization to	proceed with analysis and accep	tance of cor	ndition on ba	ack.	Sample di	ananal instruction	21		7 Dies		. #0.00			7.0									

Sample disposal instruction:

Disposal @ \$2.00 each

Return to client

Pickup

Chain of Custody Record

Outside Lab:

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Client: Tetra Tech							Collec	ctor:	m	a-1	k	B	ur	ke	ty o	ldier	spoi	81.91	d yla	Page.	2		gei	6
	old". Upon specific w					nth, includ									sam	Projec	ct Cor	ntact:	Jo	ame	5 1	Elli	ot	
	ed holding of sample					ath savies	Locati	ion: _	Sit	0 /	14,	L	emo	ore	enite	NA.	5	en e	d ye	es m	iqma	e ,ini	Clie	
Email: <u>Lalamanananan</u>	Phon	ie: 80	15-68	31-31	00	dt at bemi	ax: _	nd ye	em ai	alqm	52.60	enge	ib ot	ficult	tib x	Turn a	aroun	d time	01	1-5	ik	mes	sH	
EDF: Yes No				le Recei							8	260	B		TC)-15					.68	II IISE	poq	T
Global ID: na la bermohe	content analysis is pe	osture <u>.</u>	Seal Ir	Yes Intact: Yes Intact: Yes Intact: Received	es No No	DNFA_	ext	y we	s. Dr	value	ght	lew 1	ew n	bet	epqe	916	ses	TO-15	its:)2 N2	ing R	hoq	dib	
Special Instructions:				are con ed or de for legal	increase e liable f	nt of when ny time be ccounts ar	diesel	dep nay ngu		bni liib me s	Cre Sins	baved bayed	net Baper	are neen west	emns od as emi o	adit is on in aontr	d offi licati licati	8260B	edit is to the	CO2 02	TLE	ys a	bs sb	co
	ortation method of sa region at the time the						gas	1.1 TRPH	1 for BTEX/MTB	BTEX / Oxygenates	H gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	LCC (specify)	Naphthalene 8	Methane	Fixed Gases	21 PCE,	istan mpi mit e		Total # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418.1	8021	BTE	ТРН	NO	DTS	Ket	Full	BTE	ГСС	Nap	Met	Fixe	80	pled	90	Tota
ST2-10 5AV	AHHOL HIS WING SOON	60	1140	2/26	SV	Syringe								0110	I.S.H	0.19	pitto	ns y	d pri	linw	X	DUEA	bs	1
ST3-55		21	1236	1	/	1															×			1
5T3-NF		21	1236																		X			1
5T3-PK		21	1259																		×			1
5 T3-TF		21	1259)															×			1
573- CU		21	1312	-																				1
5T3- PL		105	1312			(X	-		1
NT1-55		6	1350																		X			,
NT1-2		12	1351																		×			1
MT1-4		18	1400	1	V																×	-		1
Relinquished by: (Signature)			(company)		Received b	Signature)	///	1							(compa			Date:	16-	38	Tin		0.	_/_
Relinquished by: (Signature)	elinquished by: (Signature) (company)						O.C.								(compa			Date:			Tin		30	-
Relinquished by: (Signature)	linquished by: (Signature) (company)														(compa	any)		Date:			Tim	ne:		
'Signature constitutes authorization to pr	are constitutes authorization to proceed with analysis and acceptance of condition on back.								7 0:															

Sample disposal instruction:

Disposal @ \$2.00 each

Return to client

Pickup

Chain of Custody Record

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Date: 2 -	26-08	
H&P Project #_	TO22508-	T2
ng times are c		

Client: Tetra Te	olo leem of tebro mis.	eong of	narges	SIS SUC	Mene u	(Collec	tor: U	4.1	3 un	ke	, (ros	664	o Aun	distri	oose	n Bru	F	Page:	3	_ of	6
	old". Upon specific wr		esignate	npies d	ling san	nth, includ	Client	Proje	ct # _	21	38	4-0	02	1	e	rojec	t Con	tact:	Jo	me	5	E11,	ot
	ed holding of samples				2113	10 850 156	ocati	on: _	Sit	e	14,	L	em	001	е	NA	1-5		20		1	,3110	
Email:	Phone	: _ 80	05-6	81-3	\$100	rti ot bemif	ax:	id ye	m 26	Igmi	EP GS	onzi	n of	luoil				time:	0	n-	s it	SEXE	Н
EDF: Yes No				e Receip						L	8	260	В		ТО	-15				2	,675	I loc	NG I
Global ID:	content analysis is pe	oisture	Seal Int	act: Yes	s No E	AVA SULEV	ext	W Y	G as	ulav	ight	ew to	wy ni 190	beh	pgen	ene.	yses] TO-15	its:	□ 02 □ N2	10 miles	noqe enoi	ISI dib
Special Instructions:							diesel	yem	mits	Lib	Cre	beve an A		noe	i asi	non	Isoli 160	8260B	iben:		PCE	nsvi a zvi	os sh
								Supris I	TBE	tes			m						econ] CO2	11	Islan	ers
					utevišs.		gasoline	erit ov	EX/N	gena	free y	rinds	Vac	s tae	1016	00.8			ino		Ta	igna	ntain
								418.1 TRPH	11 for BTEX/MTBE	BTEX / Oxygenates	TPH gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	C (specify)	Naphthalene	Methane	Fixed Gases	100	noit o	Total # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418	8021	BTE	TPI	VO	DT	Ket	Ful	BTE	TCC	Nap	Mei	Fixe	80	pied	Tota
NT1-7	g entre) merenib essin	27	1415	-2/26	SU	Syringe									8H	0 191	offic	ns v	i pn	litry .	×	gusyl	1
NT1-10 NT2-55 NT2-2		36	1418	/									-								X		1
NT2-55		6	1425	-																	X		
NT2-L		12	1428																		X		1
NT2-2 Dup NT2-4		24	1429																		X		
NT2-4		18	1442	-(×		(
NT2-7		27	1445																		×		1
NT2-10		36	1449																		X		1
NT3-2		12	1456																		×)
NT3-4		18	1501	V	V																X		1
Relinquished by: (Signature)			(company)		Received	(Signature)	lul.							1	(compa	iny)		Date:	-26	5-08	Tin	7	30
Relinquished by: (Signature)	inquished by: (Signature) (company)					by: (Signature)	- W								(compa	ny)		Date:			Tin		
elinquished by: (Signature) (company)					Received b	by: (Signature)									(compa	iny)		Date:		,	Tin	ne:	
Pignatura constitutos authorization to	ture constitutes authorization to proceed with analysis and acceptance of condition on back.						n:		7 Die						Potum to				Diokun				

Chain of Custody Record

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Date:	2	-26-08
H&P Projec	t#_	TT022508-72
Outoide Lab	BI	

Client: Tetra	Tech	song et	harges	SIS SUIC	h analy	an yiqqa o	Collec	tor: L	u !	34-	ke,	(. (Ch:	sby	il Isib	oget	1 811	F	age:	4 s E	of	6	5
riddiooo.	old". Upon specific writed an holding of samples					onth, including	Client	Proje	ct # _	21	381	4-0	2	selqn	/ F	Projec	t Con	tact:	Ja	ime	s E	Ilio	t	
	Phon						ocati	on:	Site	1	7,	Ler	200	re	//	(urn a	round	I time:	J 100)u	5.4	e	44	_
EDF: Yes No	FIION			le Receip			ax			Г	8	260	В		-	-15		i ume.			.99	168	AI.	
Global ID: ns is bermon	content analysis is per	oisture	Seal In	Yes 🗆	No s No 2	SN/A WEV	ext	lw y	1s. D	uisv	ight	bw fe	w ni	beh	pqer	91S	esev] TO-15	ialicali	O2	W	Briof	Я ib	
ts efforts to collect					increase increase is liable servation of that of that		H 🗌 gasoline 📋 diesel	418.1 TRPH	21 for BTEX/MTBE	BTEX / Oxygenates	TPH gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	C (specify)	Naphthalene 8260B	Methane	Fixed Gases CO2	21 PCE, Te	lysno listan ampl	is do lo	Total # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418	8021	BTE	TPI	VO	DTS	Ket	Full	ВТЕ	TCC	Nap	Met	Fixe	80	peter	10	Tota
NT3-7	a cirrial motoria acom	27	150%	2/26	SV	Syringe		,							8H	0 18	offic	ly an	d grif	Brw	×	nsvi	255	1
NT3-10		36	1513		1	/															X			1
NT 4-2		12	15/8																		X			1
NT4-4		18	152																		×			1
NT4-7		27	1528																		X)
NT47 Dup		39	1520	1																	×			1
NT4-10		36	154	1																	×			1
NTS-2		12	154																		×			1
NITC-U		18	1549																		/			1
NTS- 7		V	1	V.			-												×	\dashv	\exists	1		
Relinquished by: (Signature)							4	/						1	(compa	any)			26	-08		ne:	30	+
Relinquished by: (Signature)			(company)		Received b	y: (Signature)									(compa	any)		Date:			Tim	1e:		
Relinquished by: (Signature)	elinquished by: (Signature) (company)					y: (Signature)									(compa	any)		Date:			Tim	1e:		
Signature constitutes authorization to	ature constitutes authorization to proceed with analysis and acceptance of condition on back.						n·		7 Dist	nosal @	2 63 00	lonoh	-		Return t	o aliant			Diokun					

Chain of Custody Record

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Outside Lab:

Client: Tetra Tech						sm yiqqe o	Collec	tor: V	M	Bu	rke		C. C	ros	Ly	alien	otlen	1 (11)	F	Page:	5	_ of = 11,	6	2
Addiess.					nez gnit	nth, includ	Client	Proje	ct # _	21	32	34-	02	elqn	/ 1	Projec	t Con	tact:	Ja	me	5 (Elli	07	
	ed holding of samples					atil savios	ocati	on: _	517	e	14)						AS		1 691	1	Jines	10	
Email: -gih elamas 190 s.	Phone	e: 80	5 6	81-3	100	d of bem F	ax: _	d ye	m 29	lgmi	12 82	ispo		ticut	ib 10	Turn a	round	l time:	01	1-5	ike	nexe	H	
EDF: Yes No			Sampl	le Receip	ot						8	260	В		ТО	-15				01	.88	156	14	
Global ID: ns is bemich	content analysis is pe	oisture		Yes 🗆	No es □ No E	AVA	rigis	w yo	G 86	ulsv	ight	ew is	iw n	bah	pgen	are	yses	lanA	:ath	N ₂	eni	toqu	Я	
			Cold:	Yes 🗆	No		ext											TO-15		2	11	snoi	10	
ni triemyag eniupen i	Preserves the right to	8H .09	1	COCIVOU	on one,	nt of wher		qebi	916	bne	sys	6 08	ten	916	me	libs	io bi		118 :1] 02	PCE	ayma	9	
Special Instructions:							diesel	may	mits	i fibi	nO.	bevo	appa sa sa	nee	d as	on h	80	98	benz	2	2	JUSA Pre- D	15	
								1.00	TBE	es	1115			10010				8260B	eon	CO2	M	istai	10	SIS
							oline	-tra-	BTEX/MTBE	lenat	har s	Nieto	/QCE	i kosa		nn s		Q.8.H	inoi	haelt	7	lams	2	ıtain
							gasoline	YPH SPH		Охуд		,,,,,,,,	ARM	1140		TBE	ecify	lene		ases				f cor
								418.1 TRPH	1 for	BTEX / Oxygenates	1 gas	0	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	LCC (specify)	Naphthalene	Methane	Fixed Gases	6	simile nobe	LI I	Total # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418	8021	BTE	ТРН	VOC's	DTS	Ket	Full	BTE	ГСС	Nap	Met	Fixe	80	poted	10	Tota
NT6-2	s ermos moiamo ceom	12	1612	2/26	SV	Syringe			-						2H	0.19	offic	ns ve	i pri	nw	×	vant	36	1
NT5-10		36	1814	/																	X			1
NT6-4		18	1624																		×			1
NT6.4 Dup		30	1625																		X			1
NT6-7	100	27	1637	/																	×			1
NT6-10		36	1642																		X			1
ST6-55		21	1652																		X			1
STG-NF		21	1656	1																	×)
STG-PK		21	1700																		X		1)
ST6-TF		21	1705	V	V	,V,		,													×			1
Relinquished by: (Signature)			(company)		Received	y. (Signature)	16							4	(comp	ny)		Date:	26	-08	Tin	70:7	30	
Relinquished by: (Signature) (company)						by: (Signature)									(compa	any)		Date:			Tin	- /		
Relinquished by: (Signature) (company)						by: (Signature)									(compa	any)		Date:			Tin	ne:		
*Signature constitutes authorization to	gnature constitutes authorization to proceed with analysis and acceptance of condition on back.						n:		Dis	posal (c	2 \$2.00	each	1	F	Return t	o clien			Pickup					

Chain of Custody Record Date: 2-26-08 MOBILE - GEOCHEMISTRY H&P Project # 77022508 - 72 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995 Outside Lab: Collector: C. Crosb Project Contact: James Ellist Address: 681-3100 On-51 to Turn around time: _ Email 8260B TO-15 EDF: Yes \(\text{No} \(\text{I} \) Sample Receipt N₂ Intact: Yes No Global ID: The laboration of a labellana Seal Intact: Yes No No Cøld: Yes No ext N/A (Received on Site) 02 diesel Special Instructions: CO2 for BTEX/MTBE BTEX / Oxygenates DTSC/LARWQCB gasoline Naphthalene LCC (specify) BTEX/MTBE Gases 418.1 TRPH of Ketones Full List 8021 Container Sample Purge Sample Name Field Point Name Time Type Type SV 708 105

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Sample disposal instruction:

Received by: (Signature)

(company)

(company)

Disposal @ \$2.00 each

Return to client

(company)

Pickup

Date:

Chain of Custody Record

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159

3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Outside Lab:

Date:	2-27-08
H&P Project #	TT 022508-TZ

									M_/	3ur	Le, 38	C 4-	02	roc	loy	Projec	ct Con	tact:	Ja	Page:	SIA I	_ of	5	» ;+
	Phon	oxiende One	for the	charge 1 - 3	nghi to	serves the	Locat	ion: _	Sit	e 90	14	o/e[ev	N 00	re	1	AS	en e	ay b	m 89	igms	a ,ine	clie	
Email:	Phon	e: 🛕 💍	68	1 2	100	rne d to the	Fax:	y be	em e	elqm	00 0		lb of	fluoi			_	time:)n:	517	e	oH	
EDF: Yes No Global ID:	sonient analysis is per	oisture <u>r</u>	Intact: Seal In Cold:	le Receip Yes tact: Yes Yes Received	No es No No	ANA	ext	y we	s. De	aula	8	260	В	i bei	TO	-15	808	TO-15	l :ejl	O2	ing li	noq noq lend	po sR diti	
riples by clients.			creased costs a		norease Hable f	of of winding time be in the same because are action, pres	H gasoline diesel	418.1 TRPH	for BTEX/MTBE	BTEX / Oxygenates	TPH gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	LCC (specify)	Naphthalene 8260B	Methane	Fixed Gases CO2	Day TLE PLE	yma ya an stan mpk	Pa adr dar dar dar dar dar dar Luc	Total # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418	8021	BTE	TPI	0/	DTS	Ket	Full	BTE	LCC	Nap	Met	Fixe	80	pate		Tota
ST1-55		6	0830	2/26	SV	Syrihae	-	1777 10	arijo i	U.DB	Alegoria.	att y.	di Ka	39111	0) 60 12H	SUBVI	o illa	CING V	d no	E III	×	orace a	No.	1
STIMP-2		2.0	0846	/	/	/															X			1
ST1-2		12	0847			/															×			1
STIMP-4		2.1	090/																		X			1
ST1-4		18	0902																		4			1
STIMP		2.1	0920																		X			1
ST1-7		27	0921																		×			1
5 TIMP-10		2,2	0940	1																	X			1
ST1-10		36	0.950																		×			1
Relinquished by: (Signature) Relinquished by: (Signature)	4	M	by: (Signature) by: (Signature)	M	1	/						(compa	-		Date:	27	. 08	Tin	161	15	1			
Relinquished by: (Signature)		Received	by: (Signature)								7	(compa	any)		Date:			Tin	ne:					
*Signature constitutes authorization to	ack.	Sample di	sposal instructio	n:		Dis	posal @	\$2.00	each	[Return to	o client			Pickup								

Chain of Custody Record

Date:	2-27	- 08	
H&P Project	# TT	022508	- T)

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Outside Lab:

Client: Tetra	Tech	song of	sepren	onus di	eylens d	apply rus	Collec	tor:	MI	Bun	ke	, (. (Cro	567	/	0028	91 901	P	age:	2 5 E	_ of	3	
Address:	old". Upon specific writ	d as h	signate	ples de	mes poil	oth_includ	Client	Proje	ct # _	21	38	4-	02	agign	UBS F	rojec	t Con	tact:	Ja	me;	SE	11/1	67	_
	ed holding of samples.	extend	for the	charge	ol Inph lo	ent sevies	Locati	on: _	51+	0	4,	DBYO	Lei	MO	0 V-	e	N	45	LYSP	11 881	qmea	JITTE	110	
Email:	Phone	80	5 6	81-	3100	tne d to th	Fax: _	ed to	en e	olgm	00 00	oqa	b 61	Roult	n di	urn a	round	time:	_ [1h	-s i	te	14	
EDF: Yes No Global ID:	conlent analysis is pan	oisture_	Intact: Seal Int	e Receip	No es 🗌 No 🗆	DHA	ext	bw y	s. Di	ule	8.	260	В	ted i	TO	-15	292] TO-15	its:	02 🗌 N2	ee ling l	sai 1 pori	PG Re dit	
	Preserves the right to dupon payment history is incurred by H&P in the ortation method of sand aregion at the time the		costs and industrial the geo	are con to rega for lega n techt	increese e liable fi		H gasoline diesel	418.1 TRPH	21 for BTEX/MTBE	BTEX / Oxygenates	H gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	LCC (specify)	Naphthalene 8260B	Methane	Fixed Gases CO2	021 PCE, TCE	lymidence and the control of the con	bs ds	Total # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418	8021	BTE	TPH	0/	DT	Ket	Full	BTE	LC	Nap	Me	Fix	8	belq	80	Tot
5T2MP-2	is simes inerellib scelli	2.0	1025	2/27	SV	Syringe	2	1444.15	PUO	0.08	ngm	cary.	BITUL	9113	UI 65 UAH	to as	offic	os v	d on	tiny	×	3081	bs	1
512-2		12	126	1	1																X)
5T2MP-4		2.1	1034		/																7			1
ST2-4	18	1033	1035																		\rightarrow			1
ST2MP-7	1.2	2.1	1045	-																	X			1
STZMP-7 Dup		4.6	1046																		X			1
ST2-7		27	1047	-																	X	\neg		1
5T2-7 Dup		39	1049	-																	X			1
5/2 MP-12	no sample	2,2		-			+														X			1
ST2-10	or sampre	36	1125	V	V	1	+														X			1
Relinquished by: (Signature)			(company)		Received	1//	1/2		PI						(comp				27	-08		61	5	-
Relinquished by: (Signature)			(company)		TReceived I	by: (Signature)									(comp	any)		Date:			fin	ne:		
Relinquished by: (Signature) (company) Receiv						by: (Signature)									(comp	any)		Date:			Tin	ne:		
*Signature constitutes authorization to	Sample di	enosal instructi	on:		7 Dis	nneal (a \$2 00) each			Return t	o clien	t		Pickup)								

Chain of Custody Record

Date: 2-27-08

H&P Project # TT022508 -

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Outside Lab:

Client: Tetra Tech							Collec	ctor: _	in	Bu	· ke	, (c. 0	Vo:	56	idiae /	oge	the m	P	age:	3	_ of	91 5)
Address:address	old". Upon specific wnt					nth <u>includ</u>	Client	Proje	ct # _	21	38	34.	0-2	dar	F	Projec	t Con	tact:	Ja	mes	SE	1110	1	_
	ed holding of samples.					serves the	Locati	on: _	site	2	4,	L	em	00	re	-	YA	5	1 ((3))	11 6 61	quies	6	110	
Email:	Phone	e: 80	5 6	81-	2 100	dt ot b em	Fax: _		em ec	demi	00 00	oqe	b ol	Huoil	iib 10	Turn a	round	time:	2	24-	-51	te	++	
EDF: Yes No				e Receip						<u> </u>	8	260	В		ТО	-15				2	.99	Isaii	99	
Global ID:	hen si sisvisos toetnoo	Disture		Yes act: Ye		PNA	igini	y we	o .a	ralut	ght	ew t	ew n	bet	oge	916	888	2	i teff	N ₂	ling l	hogs	Re	
•				Yes 1 teceived o		1	ext											TO-1		2	cost	enon	tib	
ai tramvea enjunea	Preserves the right to	žH .bs	IVA (R	eceived c	anglo	nerly to Jr		depe	ni en	brie	3 .21/1	sb 08	ten:	e16	mis	i tibe	to b		: Sta	02	4	ernye	69	
Special Instructions:							diesel	nay i	nits	il fib	91O	beve	nggi	nee	d as	ri ne	lsoi	08	iber	0 6 10	P	mey	ba sb	
								Bupa	BTEX/MTBE	es	111115	leq a	m	1688		BROR	1 195	8260B	ness	C02	W		UD	ers
							line		X/M	enat			QCE								2			containers
							gasoline	HH)	BTE	Oxygenates	Utw/ y	BINGS	ARW	is Iqe	DOS	TBE	ecify	lene	1110	ases	001	içmi	100	f cor
							910	418.1 TRPH	1 for	X/X	gas	S	DTSC/LARWQCB	Ketones	List	BTEX/MTBE	LCC (specify)	Naphthalene	Methane	Fixed Gases	7) Jimir	Ш	Total # of
by generally ac-	successfully enalyzed	Purge	empice the iest	lie ton	Sample		TPH	418.	8021	BTEX /	TPH gas	VOC's	DTS	Ketc	Full List	BTE	LCC	Nap	Met	Fixe	8021	neen	90	Tota
Sample Name	Field Point Name	Vol	Time	Date	Type 5V	Туре	8, 11	67W 10	I UU	o be	lqui	,V Its	tinos	SIB	J1 88	cusi	o ita	oùos	ARMI	e ile	×	N. Italia	10	j
5T3mp-2		2.0	1200	2/27	1	Syringe	+	-							18H	to as	aitto	ns v	3 00	timw	X	V. 6	OB.	1
5T3-2	ļ.	12	1201			-	+	-													X			1
5 T3 MP-4		18	120			-	-															_		1.
ST3-4			1216		1		-	_													×			1
ST3MP-7		2.1	/232				_															_		1
513-7		27	1233																		×			1
ST3MP-10		2.2	1245	1																	4			1
573-10		36	1246	,)																	×			1
ST4MP-2		2,0	1255																		X			1
554-2		12	1256	4	V	, V			1												><			7
Relinquished by: (Signature)			(company)		Received	by (Signature)	//	///						/	comp	any)		Date:	-27	7-0	8 Tin	ne:	5	
Relinquished by: (Signature)			(company)		Received	by: (Signature)	14	11/10							(comp	/		Date:			Th	ne:	_	
Relinquished by: (Signature) (company)					Received	by: (Signature)									(comp	any)		Date:			Tin	ne:		
*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.																								
*Signature constitutes authorization	ack.	Sample di	isposal instructi	on:		Dis	posal (@ \$2.00	each)			Return	to clien	t		Pickup)							

Chain of Custody Record

2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Date:2	-27 - 08
H&P Project #	TT022508-T2
Date seum b	

Client: Tetra T	ech	to price	harges	anus sus	viene n	sın ylqqs	Collec	tor:	M	Bu	nk	0,	((705	by	disn	0021	n sn	F	age:	4	_ of	5	-
Address: No leasuper not	old". Upon specific wri				nes gall	nth, includ	Client	Proje	ct # _	21	3	84	- 0	_	F	rojec	t Con	tact:	0	am	es	E	liot	_
	ed holding of samples					arn covide	Locati	on:	517	9	14,	L	en	100	re		YA	5	- (٥.		12		
Email:	Phone	803	0	81-3	5 100	med to th	ax:	ey be	m ac	lam	32 62	ogal	h al	lunif				time:		In.	-51	re	H	_
EDF: Yes No				e Receip						_	8	260	В		ТО	-15				2		1150		
Global ID:	content analysis is per	oisture	Seal Int	tact: Ye	s No C		ext	W Yo	es D	inner	irigint	aw to	ew ne		pger	ens.	ses d cr	TO-15	lits:] O2 N2	CE	lenoil	Rib dib	
Special Instructions:							diesel	van	alim	l dib	910	bevo	nqqs	nes	i se	n ng	leal	8	iben		P	vanc	ac	
	belico of anothe at in 92H yd bemon again at a second and a samples by clients and of care in the geographic region at the time the services are										TPH gas	VOC's	DTSC/LARWQCB	Ketones	Full List	BTEX/MTBE	LCC (specify)	Naphthalene S260B	Methane	Fixed Gases CO2	OZI TLE,	lys a listar ampl mit o		lotal # of containers
Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH	418.1 TRPH	8021	BTEX / Oxygenates	#	>	0	X	Ę	В	7	ž	Σ	Œ	00	ipted liabil	10 F	2
ST4MP-4	s annot motomo saon	2.1	1313	2/27	SV	syringe									1,81-1	0 10	offic	ов у	d go	třívy	X	VIBY	08	1
ST4MP-4 Dup		4.6	1314	1																	X			1
514-4		18	1318	(X			1
5T4-4 Dup		30	1319	1																	X			1
ST4 MP-7		2.1	1330																		X			1
ST4-7		22	133	/	1																×			1
ST4-10		36	1344		/																X			١
5T5MP-2		20	1355																		X		1	1
5T5增-2		12	1356																		X)
ST5 Mp-4		2.1	1406	1	V				2												×		Ś	V
Relinquished by: (Signature)		,	(company)	4	Received	(Signature)	111	/						/	(compa	any)		Date:	-27	-08		me: 6 [.	5	
Relinquished by: (Signature)			(company)	,	Received	by: (Signature)	100							. /	(compa	any)		Date:			,	me:		
Relinquished by: (Signature)	ished by: (Signature) (company) Received														(compa	any)		Date:			Tir	ne:		_
*Signature constitutes authorization to	o proceed with analysis and accen	tance of cor	ndition on h	ack	0	enocal instruction			7 Die		S 60 0	0			Return t	a alian	4		Pickun					_

Chain of Custody Record HPL Project # 77022508-72 148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404 Outside Lab: ___ 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798 Collector M Burke, C. Croshy ler Project Manager James Elliot Address: Lemoore NAS Fax: 805 681-3100 Turn around time: Phone: 8260B Sample Receipt Notes: Intact: Ses - No Seal Intact: Yes No N/A PCE VOCs and Oxyger Cold: ☐ Yes ☐ No NA (Received on Site) 170 Purge Sample Container PO Field Notes Time Date Sample Type Type 1407 2/27 SYLINDS 1417 1418 1448 2,0 1454 12 1455 16mp-4 1503 1504 STGMP-7 1514 1515 ST6MP-10 1540 1541 1557 558 Relinquished by: (Signature Date: 17-08 (company) (gorppany) Relinquished by: (Signature) Received by: (Signature) (company) (company) Relinquished by: (Signature) Received by: (Signature) Date: Time: (company) (company) Disposal @ \$2.00 each Return to client Pickup *Signature constitutes authorization to proceed with analysis and acceptance of condition on back. Sample disposal instruction:

Chain of Custody Record 148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404 Outside Lab: ____ 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798 Collector: M. Burke Project Manager James Elliot Client Project # 21384-92 Address: Location: Site 14, Lemoore NAS Turn around time: On-sife Phone: 805 681-3100 Fax: Sample Receipt 8260B Notes: W Intact: ¥Yes □ No VOCs and Oxygenates Seal Intact: ☐ Yes ☐ No ☐ N/A Total # of containers 37 Cold: ☐ Yes ☐ No N/A (Received on Site) 3 purge Container Sample Field Notes Sample Time Date Type Type 00 NTI-SS 08/2 08/2 0813 0827 MT1-10 36 3827 NT2.55 0840 0841 0841 24 18 0854 0854 0855 0910 0910 0922 Date: 2-28-08 Relinquished by: (Signature) (company) Received by: (Signature) (company) Relinquished by: (Signature) (company) Date: Time: Received by: (Signature) (company) (company) Relinquished by: (Signature) Pickup Disposal @ \$2.00 each Return to client *Signature constitutes authorization to proceed with analysis and acceptance of condition on back Sample disposal instruction:

					Chai	n	of	C	us	to	dy	R	ec	or	d					Date:		2 -	28	8-08		
] 148 S	. Vinewoo	od St., Es	condido, CA	92029 • ph						_									Date. HPI	Projec	t #	+	0225	18 -T2	_
LABS					CA 92075 • pe, CA 90501 •									3							de Lat		soub	lon Isemí	T pribloH	
Client: Tetra	Tec	h	itplon (a)	art plaabte	te prices in	Sof		on Uni	usey	Coll	ector	и	۸.	Bu	ar j	Le	02			Page	1 915		2	Of _	5	
Address:		1		land" and back						Clie	nt Pr	oject	#	213	38	1-	02					nage	er	James	s Elli	0 1
311110 11310 113	anic	of same	nolding	e extended	drate for th	01	ripi	orti	287	Loc	ation	Si	te	14	,	e	mo	re		MA	5	jer	led	VERT RESCRI	clent san	
Phone: 805 6	81-	3100	Fax:	et havione	palmenna II A	e irra	ule i	arti n	t ho	Turi	n aro	und ti	me: _	lem	04	-41	te	Hadesi			uniyar.			elinens2 s	uolusvali	_
Notes:									compounds			826	60B				M							Sample Rece		
ned at an						asoline / diesel	TPH extended	for BTEX/MTBE	for Halogenated com	TRPH	/ Oxygenates	nates	T .es	and Oxygenates	ne	Gases	21 PUE, TO	ens ens	anin edia	er fa	totalion	E SE	3	Seal Intact: Yes Cold: Yes N/A (Received of	Yes □ No ☑ No	f of containers
Sample	Purge	Time	Date	Sample Type	Container Type	TPH g	TPH e	8021 fe	8021 fc	418.1 TRPH	BTEX /	Oxygenates	VOCs	VOCs and (Methane	Fixed	202	12191	atta	risp	O/N 16	iq à	88	Field Notes	days are o	Total #
NT3-P	36	0922	2/28	SV	Syringe												×									1
NT4-2	12	0953	/	1	/	toita	V18	810	not	Donli	0 9	(I al	018	007	they	(Hite	X	6 10	30 14		1810	012	414	riciposito	Sample C	1
NT4-4	18	0953	((6000	1 (11 010	to	msi	rie	e leo	ol ei	7. (1)	N 81	mel	1000	is n	880	×	la n		30	od alay	inge	15	lability: H	J to timid	1
NT4-7	27	1000		1	(80	l Jar	I br	18 ,9	erpina en Be	U 81	S Eli	9 V	gni	G TOP	15 01		X	8 18		gus.	nepo		OIL O	Cirenta str Laboritaci	Denotorial Lipotorial	1
NT4-7 Dup	39	1000		o contrac	chalse order	luq	hell	y y	a m	ezh	ner	10 10	bei	gm	,VIE	dnd	X	of Ri	101116	il oli	8 ebs	O	age	s dada yalla	limit of flat	1
NT4-10	36	1001		/													X		J	1.10	19007	0.111		Вирим и	pyonsyps	1
NT5-2	12	1027															X									1
NT5-4	18	1027															X									1
NT5-7	27	1037															X									1
NT5-10	36	1037															×									1
NT6-2	12	1046															X									1
MT6-4	18	1047															X									1
NT6-4 Dup	30	1047															×									1
N+6-7	27	1102	V	V	V				/								X									1
Relinquished by: (Signature)				(cor	mpany)	Rec	eived): (Si	natur	*/	Pul								(com	any)	0		Date:	28-08	Time: 1645	-
Relinquished by: (Signature)				(cor	mpany)	Rec	eived	by: (Si	gnatur	e)									(comp	oany)			Date:		Time:	
Relinquished by: (Signature)				(cor	mpany)	Rec	eived	by: (Si	gnatur	e)									(comp	oany)		C	Date:		Time:	
*Signature constitutes authorizate	tion to procee	ed with analy	sis and acce	ptance of conditi	on on back.	San	ple di	sposa	l instru	ction:			Disp	osal @	\$2.00) each		F	Return	to clie	ent	Ė	Pi	ickup		

					Chai	n	of	C	us	to	dy	R	ec	or	d					Date		2-	28	-08		
	-				92029 • ph 7 CA 92075 • p															HPL	. Proje	ect#	T	7022868	-T2	
LABS					e, CA 90501 •									3						Outs	side L	.ab: _	oni	Times: Hotel	nibiaH	
Client: Tetra	Tecl	1	ibled the	or record	- asome or	208	16/1	34.2		Coll	lector	N		Bu	- 4	e 11	6.7		Ph	Page	e:	E io	3	Of	5	
Address:	notifier o	ilijooqa r	ioqu : bloo	of so bell	angisob sale	III		TO LUIS	orii ji	Clie	nt Pr	oject	# 1	-1.	38	4.	Lei	441	2014	Proj	ect M	anag	er >	James E	11107	
Phone: 805 68	71-7	100	niblort h	ishnahis e	il tot etakik	01	Пр	BIT	28 V	Loc	ation:	5	110	0	h.	5	ite	10(1	3014			4 1 1	-	J Vem seione	, Harato	
Phone: 0 0) ()		Fax: .	d boulenes	solgmas IIA	Inc	pin a	ph c	S	Turi	-		BOB		22.0	209		i the		70	101		1	Sample Receipt		T
Notes:									spunodwo			020					PCE							Intact: Ses □ No		
ns la ber						diesel		MTBE	enated co	DV-16	nates	I YN		Oxygenates			TER		0110	314	110	ocy		Seal Intact: ☐ Yes ☐ Cold: ☐ Yes ☐ No	No □MÂ	ainers
ulre payment in occurris over 30	per of th		reserve upon ea	J9H .bets:	inegmas ens	asoline /	xtended	for BTEX/MTBE	for Halogenated	418.1 TRPH	/ Oxygenates	Oxygenates	918	and	ine	Gases	7(s an	nei has	noil	a bri soile		NA (Received on S	ite)	# of cont
Sample	Dopth	Time	Date	Sample Type	Container Type	трн 9	TPHe	8021 f	8021 f	418.1	BTEX /	Oxyge	VOCs	VOCs	Methane	Fixed	80) la	rieli	i rti	iam	190	888	Field Notes	days at	Total
MT6-10	36	1102	2/28	SV	Syringe												X									1
5\$1-55	6	1114	1	1	-	oris	/nsi	erq	not	belk	10 0	0.01	DIS),91 I	Shy	Wille	X	ne.	0800	is lo	0.00	do	July-	:nolfsello0-	Sample	1
ST1-2	12	1114			er a ens	10	hal	nsi	e leo	ol er	0 10	W 93	net	1033	e a	883	X		mad	190	of a	evin	e!	f Liability: Hi	e fimili	1
ST1-4	18	1122	1			161	Dr	0.8	pin	2 51	EH	8/19	QON.		18 B4	16 8 61 h	X		5/8			1014		io. Ulients and d methode H	Medical	(
ST1-7	27	1122	/	osiinoo	pimo sa b	uq	hell	ny i	e ni	ijak	vaeri	10 %	bei	qmi	YRB	tine	X		29.21	Bio	18 8	08/3	egi.	e liede villidai	lo timil of	1
ST1-10	36	1202	-/														X	_		1 14	180	HQ :	JE Y	d Buone ur be	AIPANS	1
STIMP-2	2.0	1215															X									1
STIMP-4	2.1	1220															×									/
STIMP-7	2.1	1230															×	\								1
STIMP-10	2.2	1239															×									(
ST2MP-2	2.0	1316	-														×									1
STZMP-4	2.1	1325															×									1
ST2 MP-7	2.1	1333															×									1
STIMP-7 Dup	4.6	[335	V	V	V	Des		// /5:	-		,	1					~	_	(con	nony)			Date	Tin	10.	1
Relinquished by: (Signature)				(cor	npany)	Reci	eive		ghatur	11									H	pany)	A			-28-08	643	
Relinquished by: (Signature)				(cor	npany)	Rec	eived	by: (Si	ignatur	e)									(con	npany)			Date:	Tim	e:	
Relinquished by: (Signature)				(cor	npany)	Rec	eived	by: (Si	ignatur	e)					1				(con	npany)			Date:	Tim	e:	
*Signature constitutes authorizate	tion to procee	ed with analys	sis and accep	ptance of condition	on on back.	San	nple di	sposa	l instru	ction:			Disp	osal @	\$2.00	each			Retur	n to cli	ient			Pickup		

					Chai	n	of	CI	us	to	dy	R	ec	O	'd				Da	te:	1	- 1	8-08		
					92029 • ph														HP	L Pro	ject #	T	A0758	08 - 7	2
LABS					CA 92075 • pe, CA 90501 •									3						tside			imest Hold	T onibleb	
Client: Tetra	malal at	hor	ikulout te	erd of took	t presump o	1 29(inole issil	onus onus	die ye						ur	K	2	on JS	Pa	ge:	4	s yes	Of _	5	
Address:				1 - 25 10				n		Clie	nt Pr	oject	#_=	21	384	1-0	2		Pro	oject N	/lana	ger _	Jumes	Elliot	-
Addiess.	. zel	of samp	oniblori	ied de noi e extended	haron for th	0 01	rioht	noun nerî	204	Loc	ation	51	te	1	1,	Le	un	oove	1	JA.	5	ed er	t vem salar	Hent san	
Phone: 865 68	1-31	00	Fax:		automor 1	A		adt.	al bo	Turi	n aro	und ti	ime: _	0	n-	514	2	Thu said	III aa	SUL		edel v	nalromast s	uobaecel	
Notes:								T	spur			826	60B				111						Sample Rece	eipt	
									spunodwoo		lan i con				o telo	el contra	DOE	oi hoh	nnon		20191	land	Intact Yes] No	
ne is bei						ese	-	TBE		1	ses		-	VOCs and Oxygenates			-						Seal Intact:	HOLLOW THE T	A
						le / di	pel	BTEX/MTBE	logena	_	genat	(0		Oxyg		S	PCE	0.00	ere al	tiha	n in	sho	Cold: ☐ Yes ☐ I	The state of the s	nichar
scounts over 30	oA. vaete	ngir ora c id triemvi	0.000	bosed be	ar decreas	gasolii	extend	for BT	for Halogenated	418.1 TRPH	BTEX / Oxygenates	Oxygenates	S	s and	ane	Gases	100	8.089	d sai	nol	lical		N/A (Received	bit site)	70 77
Sample	Depth		Date	Sample Type	Container Type	ТРН	TPH	8021	8021	418.1	BTEX	Oxyg	VOCs	VOC	Methane	Fixed	80) be price	dhi ri	non	190	68.6	Field Notes	ahasalur ahasalur	F
ST2-55	6	1354	2/28	SV	Syringe												X								
ST2-2	12	1354	/	/	1	900	V19	910	noi	Coll	20 9	0.0	976	351	Thw	Valle	X	16.10	0 0 10	Al e	31313		111000000000	o signise	
5T2-4	18	1355	((500	1	10	basi	ones	180	oble.	n di	w s	Dries	100	es n	200	×	V 177	10110	of a	eve	12.3	BH :yii Hi	J to fimi.	1
ST2-7	27	1407	1		Be Ha Je	9 16	E D	16 8	P	1/2	611	levs Levs	Dist.	gat Lie	o to	115 E	X	00 00	100			12712	M. sharish	a haliqadad	1
ST2-7 Dup	39	1407	Legin)	nentro) 10		nuq	mei	to yr	is ni	eai	nec	TO T	be	lgm	1/38	Sine	X	01 88	ausia	II6 e	bes	leq.	a lista yilk	dell'to lim	1
ST2-10	36	1408															X			100			a Branch III	US STITUTE OF	
ST3MP-2	2.0																X			-					1
5 T3 MP-4	2.1	1444	1														×		_	-					
5T3MP-7	2.1	1457															×	-		-					
ST3MP-10	2.2	1503)			_	-								×		-	-	-				+
5T3-2	12	1509	-			-	-	-									X	_	-	-					
5T3-4	18	1509				_	-	-			_						>		+	-					-
513-7	27	1218		1		_		-									X	-	-	-					
5T4MP-2	2.0	1539	V	W (nn	mpany)	Por	oived	6/18	ignatur	D /							×	((commañ	V) a		Date		Time;	
Relinquished by: (Signature)							M	14/	/	111	rk								compan			Date:	-18-08	164.	5
Relinquished by: (Signature)				(co	mpany)				ignatur										compan						
Relinquished by: (Signature)				(co	mpany)	Red	eived	by: (Si	ignatur	re)								(0	compan	y)		Date:		Time:	
*Signature constitutes authoriza	ation to proce	eed with analy	sis and acce	eptance of condit	ion on back.	Sar	nple di	isposa	l instru	iction:			Disp	osal @	\$2.00	each)	1	Re	turn to	client	[F	Pickup		

					Chai	n	of	Cı	us	to	dy	R	ec	or	'd				Date	. 2	1-	28-08	3	
] 148 S	. Vinewoo	od St., Es	condido, CA	4 92029 • ph 7						_								HPL	Proiec	t#_	TTOZ	2508-T	2
					CA 92075 • p									3		1010				side Lat		nistort :a	emiT paible	эн
LABS	a T.	-	oot ome i	1, Torranoc	5, 67100001	Piro	71011	02.12	020	ACI		- 1	<u>non</u>		lu	L	1.00000	id ale		irija de	5	Midlenco	Of 5	ol em
Ollotti.	X SHOP	REM	(1),7-131 7-31	3111 (3) 13(3)							ector				84				Page	e:		Jam	S Ellio	+
Address:	modifier.	mode lo	noq u lo noistad l	cabostyp s	oles designa barria for th	i ol	e gri Moo	Larit	PAY	Loc	ation:	oject . S I	"te	11	t .	Le	emos	re	/	VA S	laye	ed vem	ent. sample:	10
Phone: 805 - 6	81-3	100	Fax:									und ti					site							
Notes:	oq e ol l	paidle e	ag Miles	d baylese	asiq/nas il/			T	spu	T		826	60B				(A)	T			T	Sample	Receipt	sib .
1101001					ś				spunodwoo								PCI					Intact:	Yes □ No	
						diesel	90 V	TBE		5V 38	Se	le Van	1.2	enates	V 1011G		W	JEST (QE	goria	The desi		Seal Inta	ct: 🗆 Yes 🗆 No 🗆	N/A
						ie / die	pe	8021 for BTEX/MTBE	8021 for Halogenated	_	BTEX / Oxygenates			VOCs and Oxygenates		S	7		Section 2	ihorn		Cold:		ontaine
ccounts over 30	A vnotei	ign eru a d Insanzi	BO FIORLE	based be	eneginacien d or decreas	jasolir	TPH extended	for BT	or Hal	TRPH	/ Oxy	Oxygenates	60	sand	ane	Gases	170	eed	260	nois	dec	N/A (Rec	eived on Site)	# of contair
Sample	Depth	Time	Date	Sample Type	Container Type	TPH	TPH	8021	8021	418.1	BTEX	Oxyge	VOCs	VOC	Methane	Fixed	8	teres	11 (11)	1017175	9 8	Field N	otes	Total
ST4MP-4	211	1545	2/28	SU	Syringe												×							1
STYMP-4 Dup	4.6	1547	1	100		Offic	V191	910	noi	bell	20 8	il o	016	et.	Grw.	youn	×		JG M	0.00	D P	11 11000	elloù eldmi	1
ST4MP-7	2.1	1558	s (oige	olifongor	are in he p	o to	mst	nsl	leo	el ei	th th	W 3:	mst	non	is n	880	X	mo	heq	of sea	sim	JHH : ydi	idsUlabi	1
574-2	12	1615	1			1181	y be	0 10	o lie	10	2 2 3 I	eve	Dan	Offile	010	15 8	X	E JB		100000		in Halan	isan belges	1
574-4	18	1616	1	or (entrac	cha e order	uq	nsil	ТУП	e di	seiv	ner	lo x	be	qm	MI	dng	X	2981	islo	le sbs	1019	gue lisite	ytilical to fir	1
5+4-4 Dup	30	1616															X			FLOW STATE		Via Quini	w ni beansvi	1
5T4-7	27	1628															X							1
ST4-10	36	1638	Y	V	V												X							1
							-	-												_	+			
	-						-	-													-			
						-		-												+	+			
								-		-														
						-	-		-												-			
Relinquished by: (Signature)				(cor	mpany)	Rece	eived	: (Si	mater		/							(cor	npany)	IA	D	2 -28-	Time:	15
Relinquished by: (Signature)				(cor	mpany)	Reci	eived b	by: (Sig	gnature	e)	/							(cor	npany)	*		ate:	Time:	*
Relinquished by: (Signature)				(cor	mpany)	Reci	eived b	by: (Sig	gnature	e)								(cor	npany)		D	ate:	Time:	
*Signature constitutes authorizati					an an bast	200	nle di	eness!	instruc	otion:			Dien	neal @	\$2.00	each		Retu	n to cli	ent	-	Pickup		

					Chai	n	of	Cı	us	to	dy	R	ec	10	d				Date	2	- 3	29-08		
					92029 • ph																	T02250	8-72	
LABS					CA 92075 • p e, CA 90501 •									3						ide Lab		прон окал	Louisland	
Client: Tetra		ch	(block let	order to nie	ini saaliq o	260	iert	SULC	VSIS						in	Le	oviesa Pviesa	191	Page	the c	11	of Of	3	
Address:										Clie	ent Pr	oiect	# 5	21	38	4-	02		Proje	ect Man	ager	Jame	s Ellio	+
6/1/ 10 1000/101	201	of same	noidine	nabpetze n	dingteau aya dina) aptark	ot	righ Idoh	anii	20V		ation			1			IAS	Le		oore		ad vem asin	mea Inalia	
Phone: 805 62	31-3	100	Fax:								n aro				0	u -	site							
Notes:		anicano o	10 0 10 10				T		spu			826	0B				1	T		T	T	Sample Rec	eipt	
									spunoduo								CE					Intact: Yes	□No	
TIS IS CON						se	bo.v	BE	ted co	SV N	SS	n Km	4 , 33	nates	1110		+	ouno	1010	15 450	No.	Seal Intact:	Yes □ No □NA	SIS
						ie / die	pa	EX/M	ogena		genat			Oxyger		rn.	PCE					Cold: ☐ Yes ☐		ntaine
coounts over 30	A violai	gn enra d Inemys	eviocei ea noou	bezed bosed	are competa d or decreas	lasolir	xtend	for BTEX/MTBE	for Halogenated	TRPH	/ Oxy	nates	40	and	ne	Gases	7	need need	BBA	Cation	1	N/A (Received	on Site)	t of co
Sample	Depth_	Time	Date	Sample Type	Container Type	TPH	TPH e	80211	8021 f	418.1	BTEX / Oxygenates	Oxygenates	VOCs	VOCs	Methane	Fixed	802	sensi	ni riih	om 18	9 28	Field Notes	days are s	Total #
STSMP-2	2,0	0911	2/29	50	Syringe												×							1
575MP-4	2.1	0929	1	1	/	ods	/106	81Q	noi	pelk	0 9	U cu	bis	gen a	15 ww	chile	X	gea)6 kb	9.8908	3 19	:nolloslic	Sample C	1
5T5MP-7	2.1	0939	((10	one!	nedi	Iso	ol eg	0 (9)	wei	ianı	HOOG	sa ni	883	X	e mno	heq	ot alev	de.	sblitty: HPI	Limit of L	1
ST5-2	12	0945				JBC St. In	l ian	8,8	ispin n lle	3 87	s atr	e ve	ing in	qms s to s	is bi	5 8	X	al a	e l	ng Dox	on bh	Clients streu	benebasi	1
ST5-4	18	0945	-/	or (contract	pino e) erio	uq.	neil	- yri	e ni	esty	risid	to To	bei	Igeni	.Vne	tino	X	1898	islo-li	e elea	3180	ua tierta ytik	and to had	1
ST5-7	27	100/															X		Hio	190/10	118	in wirting by	advanced	1
ST5-10	36	1001															×							1
576mp-2	2.0	1029															X							1
ST6mp-4	211	1035															X							1
5+6mp-7	2.1	1046															X							1
5 T6 MP-10	2.2	1056															X							Ì
STEMP-10 Dug	4.7	1058															X							1
ST6-2	12	1/18			1.												X							1
576-4	18	1118	1	\bigvee	V			,	,			,	1				X							1
Relinquished by: (Signature)				(con	npany)	Rece	eived b	(Sig	nature	X/	Mi	1						(cor	ppany)	P	Dat	-29-08	Time: 1333)
Relinquished by: (Signature)				(con	npany)	Rece	eived b	y: (Sig	nature	9)	-00							-	npany)		Dat		Time:	
Relinquished by: (Signature)				(con	npany)	Rece	eived b	y: (Sig	gnature)								(cor	npany)		Date	e:	Time:	
*Signature constitutes authorizati	on to process	d with analys	ie and accor	stance of condition	on back	Sam	nle dis	nneal	instruc	tion:			Disno	seal @	\$2.00	each		l Retur	n to clie	nt		Pickup		

LABS	432 N	l. Cedros	Ave., Sola	ana Beach,	Chai A 92029 • ph 7 CA 92075 • p e, CA 90501 •	760.7 h 85	735.3 8.79	3.04	• fax	760 fax 8	.735 358.7	.2469 93.0	9 404		ď				Date: _ HPL Pro			508-T	2
Client: Tetra	Te	ch	whiten Jes	ard of tobic	to prices to c	290	ned	MUS	ysis	Col	lector	r	n.	E	Bu	- k	e	JEH	Page: _	ed h	2 0	, 3	
Address:		_14						ta. it.		Clie	ent Pr	oject	#_=	21	38	4-	07			Manag	per Jame.	Ellion	1
. em ao jeunipo	201	amaa lo	paibled b	e extender	harge for th	o al	non	arii	28V	Loc	ation	5	te	- 1	4,	1	VAS	C			d ad yem sa		
Phone: 805 62	11-31	00	Fax: .						_		n aro			-	10-	91	te						
Notes:	100-0		ALC: UNITED A		autorius na	T	Т		spu			826	60B				lal				Sample R	eceipt	
									spunodwoo								PCE				Intact: Ye	s 🗆 No	
ns is be						les	ed v	BE		BV N	S	v Van	1 .21	ates	r trip		W)	8710	101 918	yses	BILA CETTURE	Yes No NA	S
						/ dies	-	TM/X	genat		enate			xyger			7				Cold: ☐ Yes	□No	tainer
ni Inemyag ament in						soline	ende	for BTEX/MTBE	Halo	RPH	Oxyge	ates	616	O pui	0	Gases	200	e an	184 1658	no by	N/A (Receive	ed on Site)	f con
or solver out at the collect.	purge		ho putoni	Sample	Container	тРН да	TPH extended	8021 for	8021 for Halogenated	418.1 TRPH	BTEX / Oxygenates	Oxygenates	VOCs	VOCs and Oxygenates	Methane	Fixed G	302	5101F	i diaon	190		U8 616 8/8h	Total # of contai
Sample	Depth	Time	Date	Туре	Туре	_	ㅂ	80	80	4	I B	ô	>	>	M	íĒ	80				Field Note	S	10
576-7	27	,	2/29	SV	Syrings	-		CONTRACT OF THE PERSON NAMED IN	nor	halli	10.0	HI ON	has	Seri I	91100	VIII	7	0.00	s Ma 2	1600	Per moltoet	Samole Co	1
576-10	36	1130	/		1			1111	-								7	7					1
576-10 Dup	48	1130	(0 (11 016	10.	hast	nelan	(63	ol si	d ett	W B	met	1000	в п	283	X	emo	160 01	Svii	bling: HPL s	Limit of Lia	1
ST3-PL	105	1217				IIISI W N		5 ,55 6 to	Pile	do		D. V.	lide.	4111		0 1	X	500	10 10 10 10 10 10 10 10 10 10 10 10 10 1		Dispits since	U DS 1950S1- un hatanoss	1
5T3-CU	21	1218			0000 000	gq.	neil	-ym	n ni	ezh	nen	10 10	bei	qmi	V38	uno	X	esel	slo lis	bea	ly shall supe	limit of liabil	1
ST3-TF	21	1227															+	10	H 16 19	olillo.	wayd gnunw		1
5T3-PK	21	1227															7						1
ST3-NF	21	1243															X						1
ST3-55	21	1243															X						1
5T6-PL	105	1258															X						1
516-C4	21	1259															X						1
1+6-TE	21	1259		1																			1
576-Pk	21	1313															X						1
CTI-NE	21		1	11/	1												1		-				1
Relinquished by: (Signature)	21	1313	V	(con	npany)	Rece	eive	y: (Sig	nature	ip .	11	1					*	Com	pany)		Rate:	Time;	1
				lean	anany)	1	///	u,	/	2	4						- (177			2ate: 29.08)
Relinquished by: (Signature)				(con	npany)				nature									(com	pany)		Date:	Time:	
Relinquished by: (Signature)				(con	npany)	Rece	eived b	y: (Sig	nature)								(com	pany)		Date:	Time:	

					Chai	n	of	Cı	us	to	dy	R	ec	10:	rd					Date	۵.	2) -	29-08			
	432 N	. Cedros	Ave., Sola	ana Beach,	A 92029 • ph 7 CA 92075 • p	h 85	8.79	3.04	01 • 1	fax 8	358.7	93.0	404							HPL	. Proj		T	T0225	-08 -	-7-	2
LABS		208th Str	eet Unit F	-1, Torrance	e, CA 90501 •	ph 3	310.7	82.2	929			- 10	had		ler	1			211		side L	.ab: _	?	over seem	3	00	_
Client:	10				7 11 SIAC Q OF	0.00	(101)	ALUK I	Sion		lector		-	_			02			Pag	e: ect M	anac	ner :	James	Ell	ist	
ora to recupe	- 1 -	mez ko	oribles b	ebnetke s	her occupies that the the	101	o gio Irion	edi	29V		ation		-	- 1	4,	1	VA	+5	(no			d yem sela	and, sam	olio	
Phone: 805 @	81-3	100	Fax: _	d havissa	Landrenna II/I	In				Tur	n aro		100	lam	Oi	1.5	ita	2		10				polone2 s	uto byone		_
Notes:									spuno		-	826	60B				372							Sample Rec	s. acond	dis	
ed at an re payment in counts over 30	s performe	nalysis is	eviusen .	moisture d	sined when a second or decrease and ar decrease as	TPH gasoline / diesel	TPH extended	8021 for BTEX/MTBE	8021 for Halogenated compounds	TRPH	BTEX / Oxygenates	Oxygenates	7 . as	VOC s and Oxygenates	ne	Fixed Gases	021 Pee, T	ni be	sorts	181	ns a	yse yse	1	Intact: Ness Cold: Yes Cold: Yes N/A (Received	Yes 🗆 No 🖻	> XX	Total # of containers
Sample	Purge Depth	Time	Date	Sample Type	Container Type	ТРН 9	TPH e	8021 f	8021 f	418.1	ВТЕХ	Oxyge	VOCs	VOCs	Methane	Fixed	8) Jae	nelle	int	iom	189	898	Field Notes	z ens ey	60	Total #
5T6-55	21	1314	2/29	5~	Syringe	oits	yneg	erq	noit	leci	10 8	17 01	816	91	liw	yillik	×	ns t	1000	B 10	a e	ob	J-Ris	nollosilo	O elqm	18	1
976 859	ivies sett	end off	s noips	oirlestpos	are in the qu	ito	msh	rieli	iso	ol si	0 (1)	77.9	mst	100	26 ft	860	ivasi	illa	mel	180	01.8	svin	ta J	3H :ypillde	L to fin		
jonerally ovided This	Syzed by c	ans yilu	ezuppus traucosa	ed aso as	tot all sample	Jer	l bri	0,0	apin es ile	u en	3 B)(ove	ţm	omi I tel	id si	TR R	alqri Haaar	88 9	s Jen	0.65	ing	2081	blu	Clients sho	.bareba	181	
e authorized in	L larms ar	enotib.	t, unies	enines to	chase order	uq	maik	Va	s ni	SSI	ner	10.10	bed	gm	ME	dno	o ar	l ol e	984	slo	18.8	000	iaqi.	e floria yillis	deil lo li	mi	
																				7.14	180	IIG.	16 (a gridniw ni	yanced	08	
																		4		4	-						
																			+	-	+						
																			-	+	+						
																				1							
Relinquished by: (Signature)				(cor	npany)	Rece	eivetiy b	y: (3 1g	nature		//								(gom)	pany)			Date:	-29-08	Time:	30	,
Relinquished by: (Signature)				(cor	npany)	Rece	ived b	y: (Sig	nature	1								-	(com	/		-	Date:		Time:	,	
Relinquished by: (Signature)				(cor	npany)	Rece	eived b	y: (Sig	nature)									(com	oany)			Date:		Time:		
*Signature constitutes authorization	ation to procee	d with analys	sis and accept	ance of condition	on on back.	Sam	ple dis	posal	instruc	tion:			Dispo	sal @	\$2.00	each			Return	to clie	ent] P	Pickup			



United States Environmental Protection Agency

Office of Research and Development (8101R) Washington, DC 20460

Official Business Penalty for Private Use \$300

EPA/600/R-09/073 August 2009 www.epa.gov Please make all necessary changes on the below label, detach or copy, and return to the address in the upper left-hand corner.

If you do not wish to receive these reports CHECK HERE \square ; detach, or copy this cover, and return to the address in the upper left-hand corner.

PRESORTED STANDARD POSTAGE & FEES PAID EPA PERMIT No. G-35